

# Lummi Nation Atlas



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# Lummi Indian Business Council Organizational Chart

*Chartered Entities*

**NWIC**

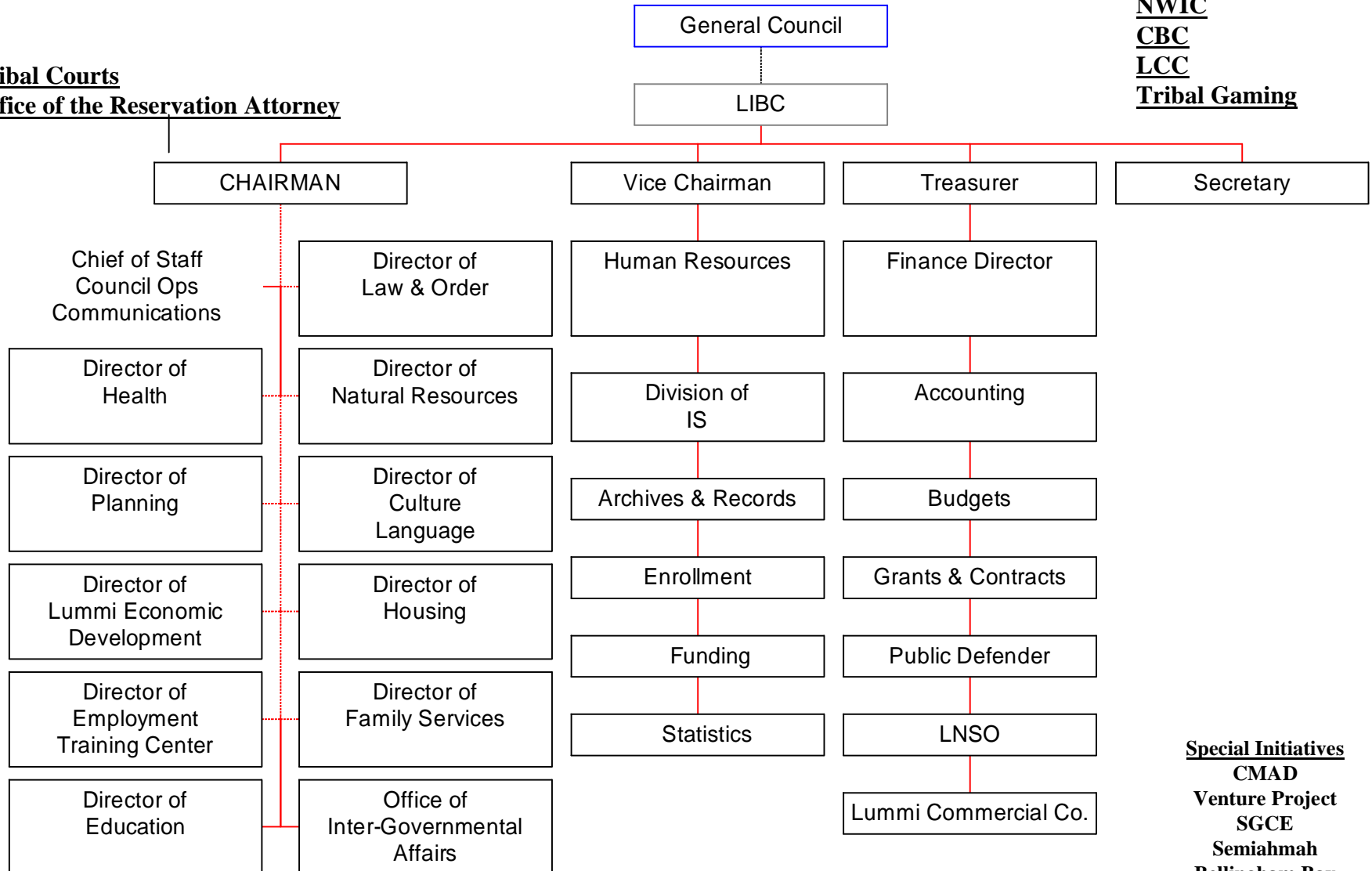
**CBC**

**LCC**

**Tribal Gaming**

**Tribal Courts**

**Office of the Reservation Attorney**



Adopted by LIBC Resolution 2005-062

**Special Initiatives**  
**CMAD**  
**Venture Project**  
**SGCE**  
**Semiahmah**  
**Bellingham Bay**  
**Health Reform Task Force**

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## **General Location of the Lummi Indian Reservation**

### **Area Description**

The Lummi Indian Reservation (Reservation) is located approximately eight miles west of Bellingham, Washington, 90 miles north of Seattle, Washington, and 60 miles south of Vancouver, British Columbia, Canada. The Reservation is comprised of a five-mile long peninsula (Lummi Peninsula), which forms Lummi Bay on the west and Bellingham Bay on the east; a northern upland area and the smaller peninsula of Sandy Point; the flood plains and deltas of the Lummi River (a.k.a. Red River) and the Nooksack River; Portage Island; and associated tidelands.

The Reservation is located at the mouth of the Nooksack River and along the western border of Whatcom County, Washington. The Nooksack River drains a watershed of 786 square miles, flows through the Reservation near the mouth of the river, and discharges to Bellingham Bay (and partially to Lummi Bay during high flows). The Reservation is located at the southern extent of Georgia Strait and the northern extent of Puget Sound.

Approximately 38 miles of highly productive marine shoreline surround the Reservation on all but the north and northeast borders. Much of the high-density development to date has occurred along the marine shoreline. The Reservation also features relatively low topographic relief and a temperate marine climate. Today, the Reservation uplands encompass approximately 12,500 acres and the tidelands are approximately 7,000 acres.

### **History**

Prior to European American arrival, the ancestors of the present-day Lummi occupied a far-flung territory that included much of the San Juan Islands, as well as the coast from Fraser River south through the environs of Seattle. The relative ease of transportation along regular seasonal migration routes to fishing sites, berry and other harvesting grounds, game hunting areas, waterfowl hunting sites, and winter villages accounted for the wide geographic range. This broad use of many different sites, sometimes roughly overlapping with other bands, was a key feature of Coast Salish peoples (Suttles, 1974). These lands and waters were of immense cultural significance as they relate to the genesis stories and the subsequent history of the Lummi Nation. This territory was a "homeland" vital to the cultural identification and material existence of the Lummi and in which resources were available to sustain them as a group.

The Lummi made wide use of the resources of the territory for their own subsistence purposes and for a broad and generalized trade with others in the area during the aboriginal and protohistorical periods (c. 1780s to c. 1850). Long-standing Lummi cultural patterns, or "traditions," included complex interlocking and overlapping concepts of individual and corporate (village, band, tribal) ownership of their territory. Thus, individuals and families owned the rights to use certain resource and settlement sites, but ownership incurred broader obligations to distribute significant portions of any surplus throughout the Indian community. Lummi were dependent on specific sources of fresh water for their occupation of settlement and certain resource-gathering sites (Friday, 2003). Ceremonies and legends related to salmon and salmon fishing, with names such as The First Salmon Ceremony and the Tale of the Salmon Woman have been passed down through generations and provide evidence of the sacred relationship between the Lummi history and culture and the salmon.

The Lummi Reservation was created in 1855 with the Treaty of Point Elliot. In 1873, the western part of the Reservation, including Sandy Point, was added by executive order.

Friday, Chris. 2003. Analysis and Documentation of Lummi History Aboriginal, Prehistoric, Treaty, and Reservation Periods for the Lummi Peninsula Water Rights Case.

Suttles, Wayne. 1974. "The Economic Life of the Coast Salish of Haro and Rosario Straits," in *Coast Salish and Western Washington Indians*, New York: Garland Publishing.



General  
Location  
of the  
Lummi  
Indian  
Reservation

# Map 1

## Usual and Accustomed Ground and Stations

The phrase “ Usual and Accustomed Grounds and Stations” (U&A) comes from the Treaty of Point Elliott, which was signed in 1855.

Article 5 of the treaty states:

“ The right of taking fish at usual and accustomed grounds and stations is further secured to said Indians in common with all citizens of the Territory, and of erecting temporary houses for the purpose of curing, together with the privilege of hunting and gathering roots and berries on open and unclaimed lands. Provided, however, that they shall not take shell-fish from any beds staked or cultivated by citizens.”

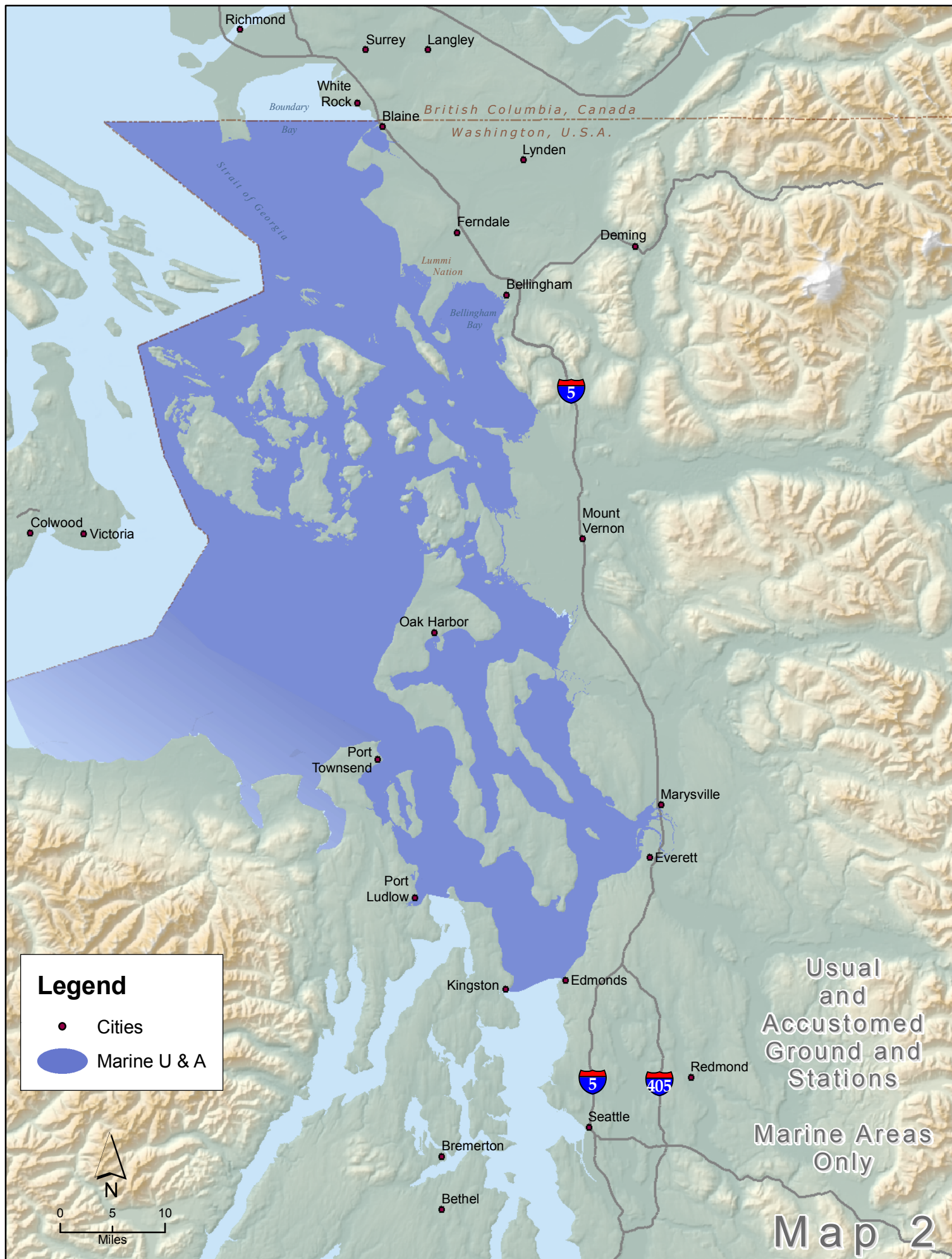
Indian Tribes in Washington State who signed ratified Treaties with the United States in the mid-1850s retained the right to “ fish” at all “ usual and accustomed grounds and stations” (‘ U&A’ ) where they had traditionally harvested water dwelling animals and plants before the Treaty. Usual and accustomed areas refer to fishing activities and is not applicable to hunting and gathering activities on terrestrial areas, which are governed by other portions of the Treaty clause. U&A include the shoreside areas involved in the fishing activities, as well as access to the water across uplands. All salt water, freshwater, tidelands and stream banks in western Washington north of a line from Olympia to the south shore of Gray’ s Harbor are within the U&A of one or more tribes. Tribal members are allowed to exercise their treaty-protected harvest rights only within their tribe’ s U&A and only with the permission of their tribe. Each tribe regulates the harvest of its members, including requiring tribal identification, setting seasons and gear restrictions, policing the harvest, and accounting for the catch. Like most northwestern tribes, Lummi has a relatively small reservation and a large U&A.

Historically, the federal courts have upheld treaty-reserved rights of tribes to fish throughout their U & A. An example is the 1974 decision in *United States v. Washington*<sup>1</sup>, which re-affirmed the validity of the Treaties and of the Tribes’ Treaty right to harvest up to half of the harvestable number of salmon (and non-anadromous species of finfish) returning to Washington waters (known as the Boldt Decision after Judge George Boldt). A similar ruling in 1994 extended the recognized Treaty right to shellfish harvest<sup>2</sup>. Since shortly after 1974, The Treaty Indian tribes in western Washington have managed the fishery resources in their U&A together with the State of Washington. Although there have been conflicts, in general the tribes and state have had numerous successes in implementing cooperative natural resource management efforts to protect, restore, and enhance the productivity of natural resources in Washington.

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<sup>1</sup> *United States v. Washington*, 384 F.Supp 312, aff’d 520 F.2d 676 (9th Cir. 1975), cert. denied 423 U.S. 1086 (1976), aff’d in substantial part, 443 U.S. 658 (1979)

<sup>2</sup> *United States v. Washington*, (“Shellfish I”), 873 F.Supp. 1422 (W.D. Wash. 1994), aff’d, 157 F.3d 630 (9th Cir. 1998), cert. den. 516 U.S. 1060 (1999)



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## **Overview of the Lummi Reservation**

The mainland of the Lummi Reservation and Portage Island total approximately 12,500 acres of land. The Reservation also includes approximately 7,000 acres of tidelands. The landforms of the Lummi Reservation were primarily determined by glacial processes and by more recent actions associated with river flood plains and deltas. The Vashon Stade of the Fraser Glaciation is the most recent glacial event to influence this area, having retreated from the Pacific Northwest about 10,000 years ago. This massive glacier formed the general shape of the Lummi Peninsula and the marine shoreline, although riverine and coastal processes influenced the smaller landforms and general topography of the Reservation.



The Reservation is a low-lying landscape with few steep slopes and little topographic relief. Elevations on the Reservation uplands range from sea level to about 220 feet above mean sea level. The higher elevations occur mostly on the Lummi Peninsula and in the northwest portions of the Reservation. These two large upland areas are separated by the low-lying flood plain of the Lummi River. The Nooksack River flood plain lies along the eastern portions of the Reservation. These flood plain areas support large, interconnected wetland systems. Lummi Island, located on the opposite side of Hale Passage, is not part of the Reservation.

## **Lummi People**

There are approximately 4,200 enrolled tribal members. Nearly 2,400 enrolled members live on the reservation. The remaining members live elsewhere in the region. Changes in population and demographics of the Lummi Reservation between 1855 and 1960



resulted from immigration of non-natives on to the Reservation, the removal of Lummi children to attend school in Tulalip and other off reservation sites between 1857 and 1932, the relocation of Lummi people to urban areas in the 1950s and 60s, and the sale of reservation lands to non-Indians. Since 1960 there has been a significant increase in the total population on the Lummi Reservation, and the number of Lummi tribal members living on the Reservation.

This is due to improved economic conditions within the community, the beginning of tribal self-governance, the increased rate of house construction, and a renewed sense of Lummi cultural identity.

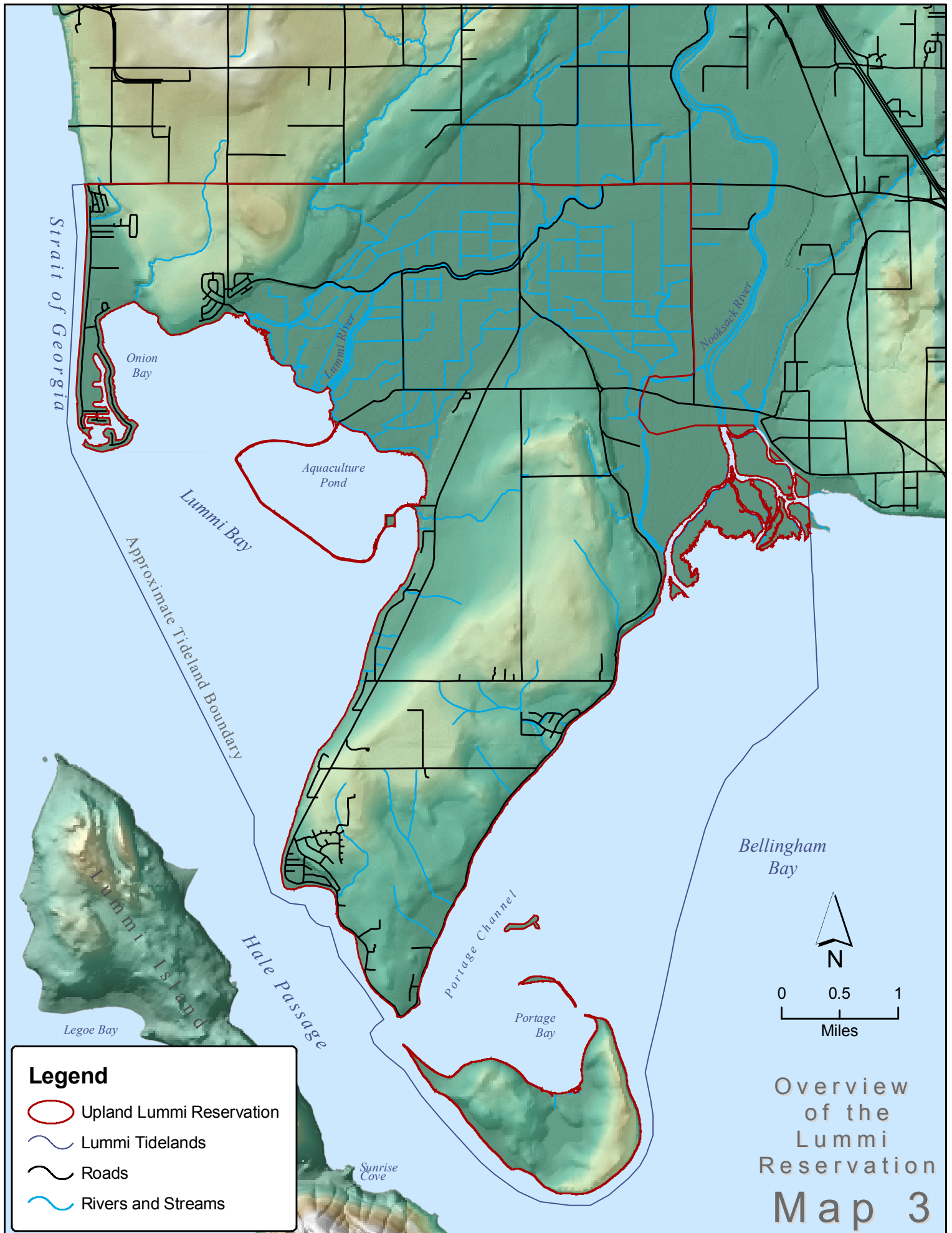


The Lummi people traditionally lived near the sea and in the mountain areas, returning seasonally to their longhouses located at a number of sites on the present reservation and on the San Juan Islands. Smoke-dried seafood, camas bulbs, sun-dried berries and all species of shellfish, crab, salmon, trout, elk, deer, bear,

and other land and sea mammals made up the traditional Lummi diet.

Changes away from the traditional diet have resulted in increased rates of diabetes, cancer, heart attacks, high blood pressure, and tooth decay. Many Lummi people still rely on fishing and shellfish harvesting as a means of subsistence and income, although in the last 15 years harvest levels have dropped significantly due to a decline in fish populations.



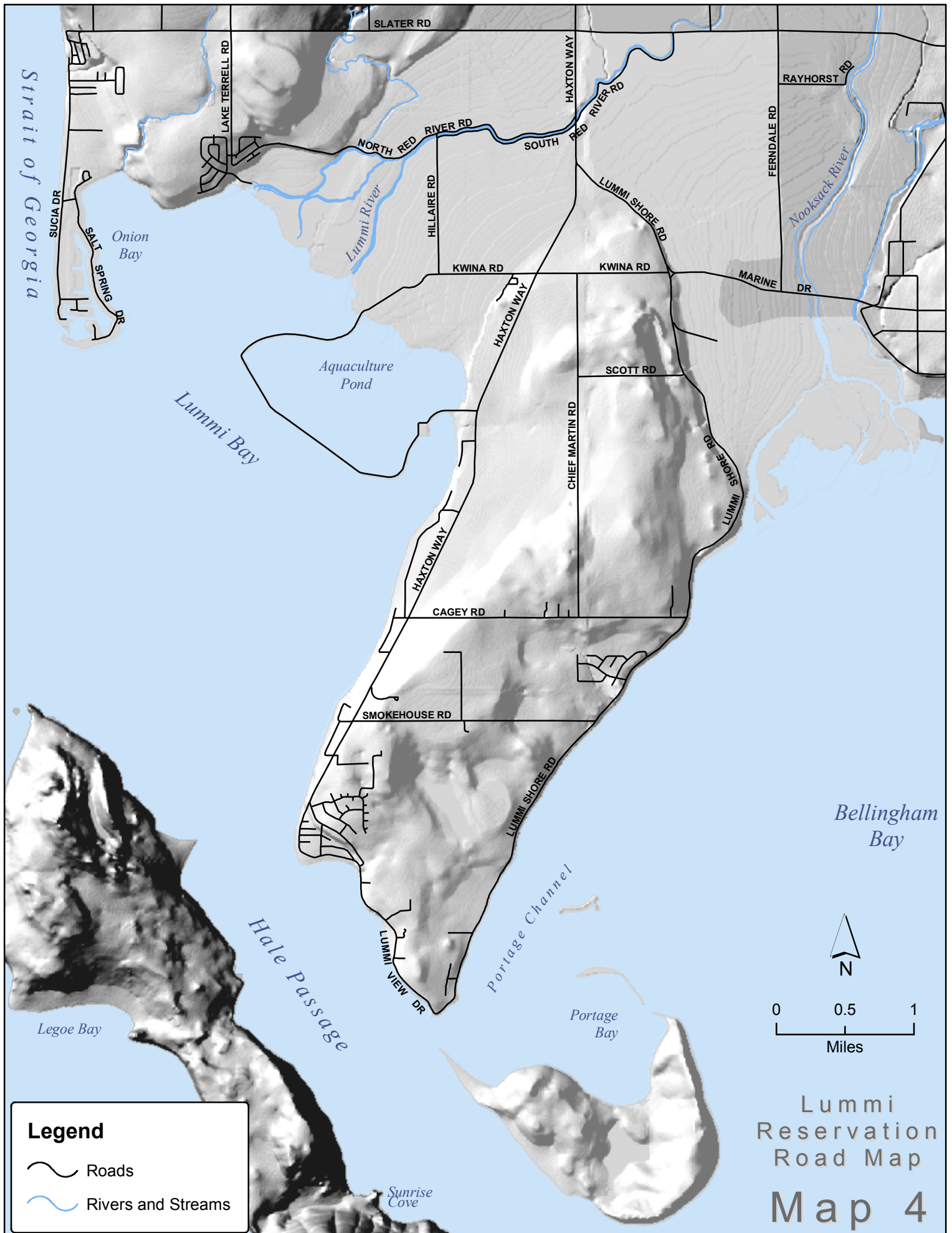


## **Roads**

Approximately 60 miles of public roads provide access within the Lummi Indian Reservation. Slater Road, bordering the northern edge of the Reservation, services the majority of east-west traffic with direct access to the Interstate 5 corridor. Haxton Way, Lummi View Drive, and Lummi Shore Road provide major north-south access forming a loop, which services the densely populated neighborhoods near Gooseberry Point as well as the Lummi Island Ferry Terminal.

Roads within the Reservation boundary are categorized as either Whatcom County roads or Bureau of Indian Affairs (BIA) roads. Since 91 percent of the roads are classified as county roads, upkeep and maintenance is provided by Whatcom County. The remaining nine percent of roads (approximately 4.8 miles) are maintained by the Lummi Nation. BIA roads, part of the National Indian Reservation Roads Inventory, are primarily spur roads, which provide access to tribal member housing developments, aquaculture, or tribal specific utilities. County roads and BIA roads are assigned functional class values, which consider road surface, traffic volumes, connections to other roads, community access, and generally indicate the importance of the road as a traffic corridor.

The Lummi Transportation Plan Update, August 2000, available from the Lummi Nation Planning Department, provides a comprehensive analysis of Reservation roads including detailed descriptions of individual roads, classification definitions, traffic volumes, planned improvements, and future needs.



## **Lummi Reservation Watersheds**

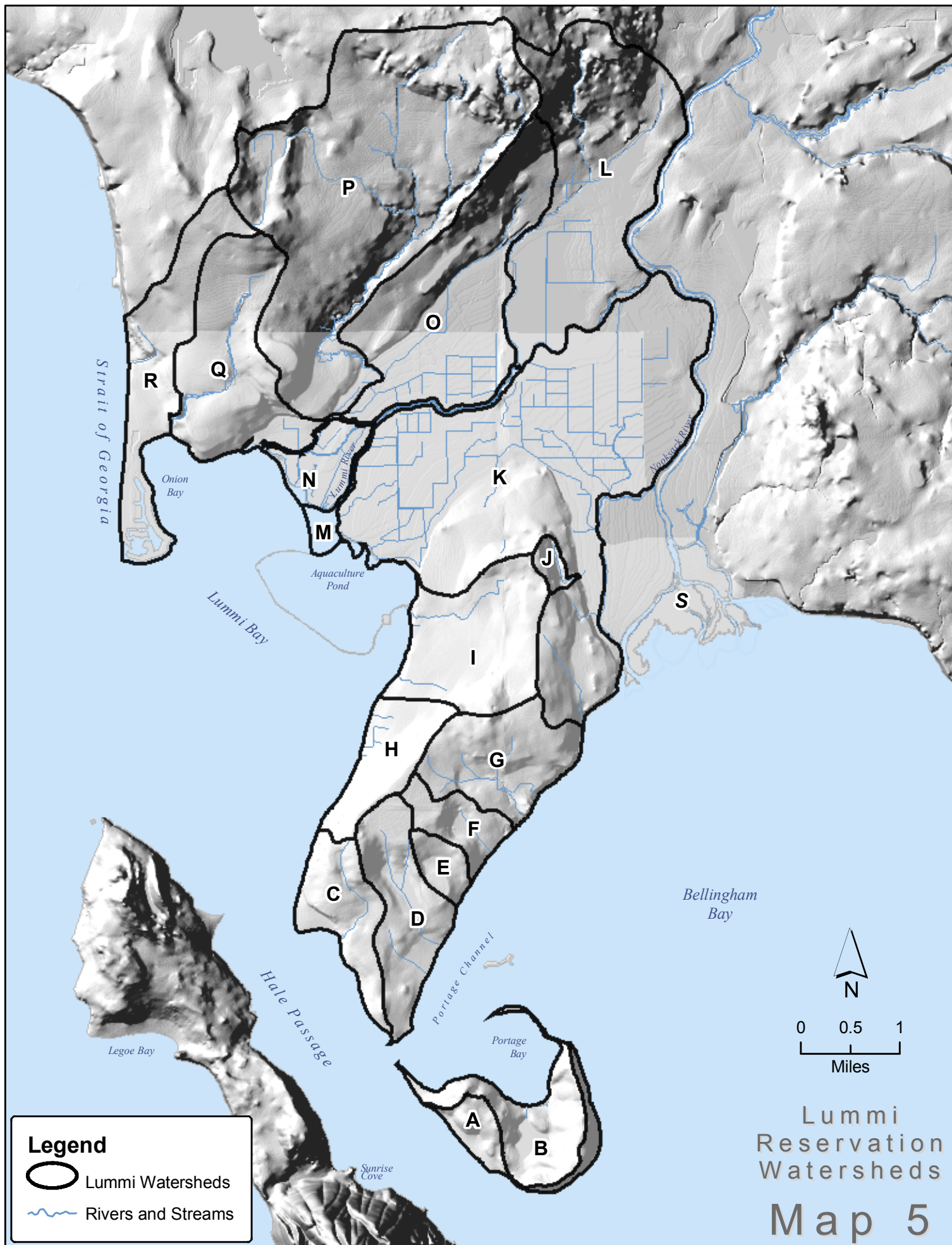
A watershed is a land area defined by topography that is drained by a stream system. Watershed boundaries are generally delineated using U.S. Geological Survey (USGS) topographic maps and, starting from a point on the stream system that is defined by the geology and topography as the watershed outlet, following the ridgelines shown by the contour lines. This method is commonly used in upland watersheds where the contour lines are relatively closely spaced and a single watershed outlet is apparent. In lowland areas with relatively flat topography, identifying the watershed outlet and associated boundaries is more difficult. Often in lowland or coastal areas there is not a single location or point that can be identified from the topography, geology, and/or hydrography as a watershed outlet.

The four 1:24,000 scale USGS 7.5-minute quadrangle maps that include the Lummi Reservation were used as base maps to identify the boundaries of the Reservation watersheds. These maps have 20-foot contour intervals. Aerial photographs and field observations during the storm water facilities inventory (LWRD 1998) were used to identify the approximate locations of agricultural drainage ditches, roadside drainage ditches, and unmapped intermittent streams on the Reservation. Field observations made during the storm water facilities inventory were also used to determine the directions of surface water flow and to refine preliminary delineations of the watershed boundaries.

Eighteen watersheds are found on the Lummi Reservation. They generally range in size from 86 acres to 4,696 acres except for the Nooksack River watershed, which is approximately 786 mi<sup>2</sup> (503,040 acres). The Reservation watersheds were identified by alphabetic letters (A through S) on an interim basis. It is anticipated that names will be assigned to the watersheds over time. Other than the Nooksack River watershed, the largest watershed is referred to as watershed K and is part of the Nooksack River floodplain.

For more information about the Reservation watersheds, see the Lummi Reservation Storm Water Management Program Technical Background Document (LWRD 1998) available from the Natural Resources Department.

Lummi Water Resources Division (LWRD). 1998. Lummi Reservation Storm Water Management Program Technical Background Document. Prepared for Lummi Indian Business Council. Lummi Reservation, Washington. December.



## **Climate and Average Annual Precipitation**

Pacific Northwest (PNW) climate and ecology are largely shaped by the interactions that occur between seasonally varying weather patterns and the region's mountain ranges.

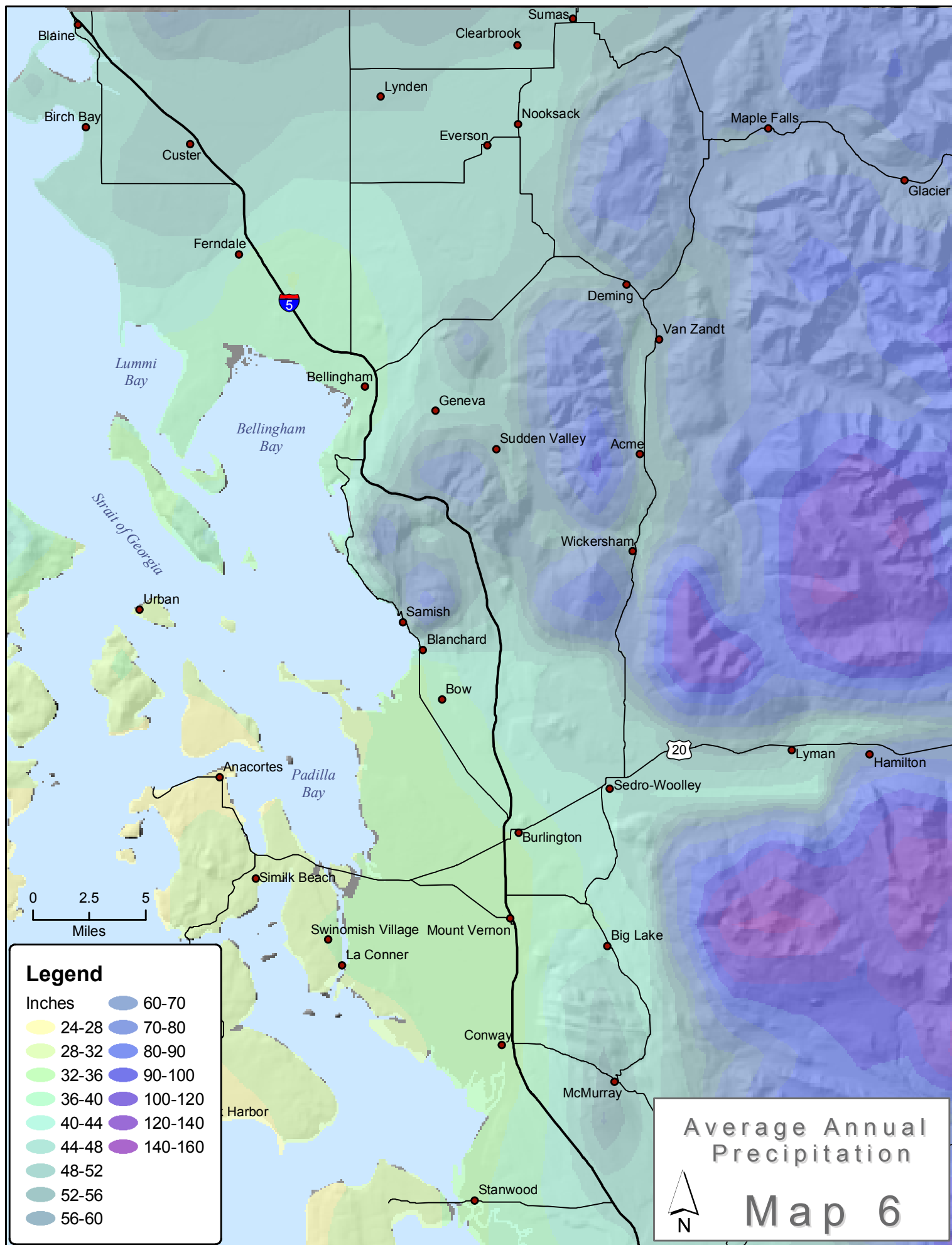
Approximately seventy-five percent of the region's precipitation occurs in just half the year (October-April) when the PNW is on the receiving end of the Pacific storm track. Much of this precipitation is captured in the region's mountains, influencing both natural and human systems throughout the PNW. Precipitation is light in summer, increases in fall, peaks in December, then decreases through spring with a slight increase in May and June followed by a sharp drop near the first of July. From late spring to early fall, high pressure to the west generally keeps the Northwest fairly dry. These seasonal variations are related to changes in large-scale atmospheric circulation occurring over the Pacific Ocean, including the Gulf of Alaska.

Mild year-round temperatures, abundant winter rains, and dry summers characterize climate in the low-lying valleys west of the Cascades. Average annual precipitation in most places west of the Cascades is more than 30 inches. Precipitation in the mountains is much higher. The western slopes of the Olympic and Coast mountain ranges - the first recipients of winter storms - typically receive about 118 inches per year, with some locations on the Olympic Peninsula exceeding 200 inches per year. Average annual precipitation in the Cascades typically exceeds 100 inches or more. The Cascades are often among the snowiest places on Earth.

Based on climate data collected at Bellingham Airport, the average annual precipitation on the Reservation is approximately 36 inches. On average, November, December, and January are the wettest months; June, July, and August are the driest months. Wind data for Bellingham indicates that the prevailing wind direction on the Reservation is from the south and southwest, with gusts upward of 80 miles per hour.

There are four weather stations in Whatcom County that have collected precipitation and temperature data over an extended time period: Bellingham, Blaine, Clearbrook, and Glacier.

Summarized from <http://www.cses.washington.edu/cig/pnwc/pnwc.shtml>, Climate Impacts Group.



## Reservation Soils

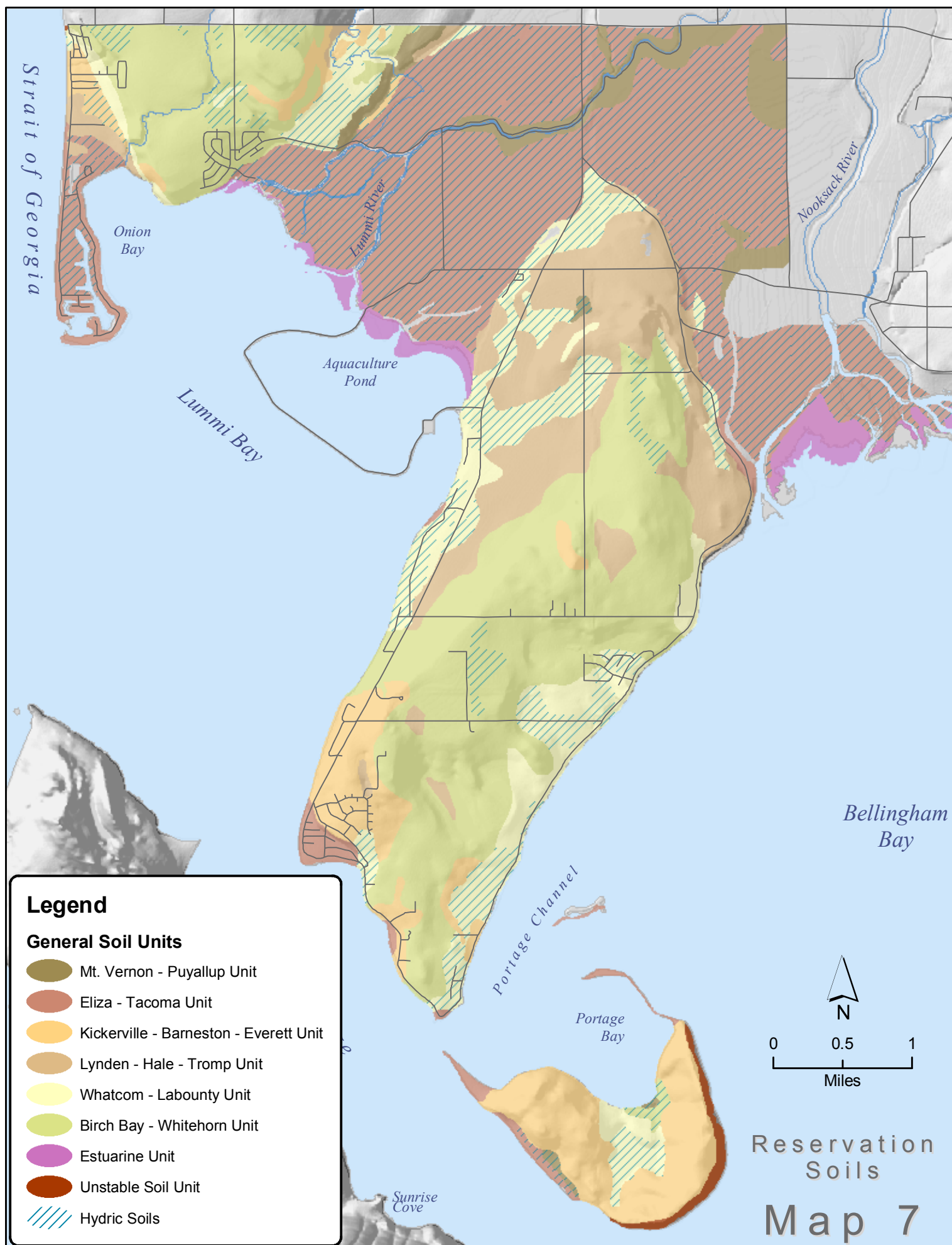
Differences in temperature, precipitation, vegetation, slope, time, and parent material each play an important role in the soil formation process. Slight variations in these factors can change the characteristic of the soil and alter the soils texture, permeability, chemical composition, vegetation, and potential land use.

Scientists have identified seventeen general soil units in Whatcom County, six of which are found on the lands of the Lummi Nation (USDA 1992). Each of these six soil units can be further divided into soil types; there are 40 different soil types identified on the Reservation. The six general soil units are:

1. Mt. Vernon-Puyallup: *Very deep, moderately well drained, nearly level soils; on river terraces and flood plains covered with shrubs or conifers.*
2. Eliza-Tacoma: *Very deep, very poorly drained, level soils that generally have been artificially drained; on flood plains, deltas, and tidal flats lower than twenty feet of elevation.*
3. Kickerville-Barston-Everett: *Very deep, well drained and somewhat excessively drained, level to very steep soils; on outwash terraces and glacial moraines.*
4. Lynden-Hale-Tromp: *Very deep, well drained to somewhat poorly drained, level to gently sloping soils; on outwash terraces at fifty to three-hundred feet in elevation.*
5. Whatcom-Labounty: *Very deep, moderately well drained and poorly drained level to very steep soils; dominantly on glaciomarine drift.*
6. Birchbay-Whitehorn: *Very deep, moderately well drained and poorly drained, level to gently sloping soils; on glaciomarine drift plains.*

For a complete review of soil types in each soil unit, refer to the soil survey<sub>2</sub> prepared by the Natural Resource Conservation Service (USDA 1992).

USDA 1992. Soil Survey of Whatcom County Area, Washington, United States Department of Agriculture, Soil Conservation Service.



## Soil Runoff Potential

The USDA-Natural Resources Conservation Service (NRCS) identified and described 40 different soil types on the Lummi Reservation (USDA 1992). As part of the characterization, each soil type was assigned to one of four hydrologic soil groups based on their runoff-producing characteristics. The hydrologic soil group, along with the cover type, drainage area, channel length, and land slope, can be used in the USDA Curve Number Method (USDA 1970) to estimate runoff volumes and hydrographs for specified storms. The primary consideration in assigning a soil to a hydrologic soil group is the inherent infiltration capacity of the soil with no vegetation (USDA 1992). The hydrologic soil groups, which are labeled A, B, C, or D, are described in the table below.

As shown in the table below, about 13 percent of the soils on the Reservation have a low or moderately low runoff potential (Group A or Group B). The remaining 87 percent of the soils on the Reservation have a moderately high or high runoff potential (Group C or Group D). These soil characteristics suggest that less than 15 percent of the Reservation uplands have a good aquifer recharge potential.

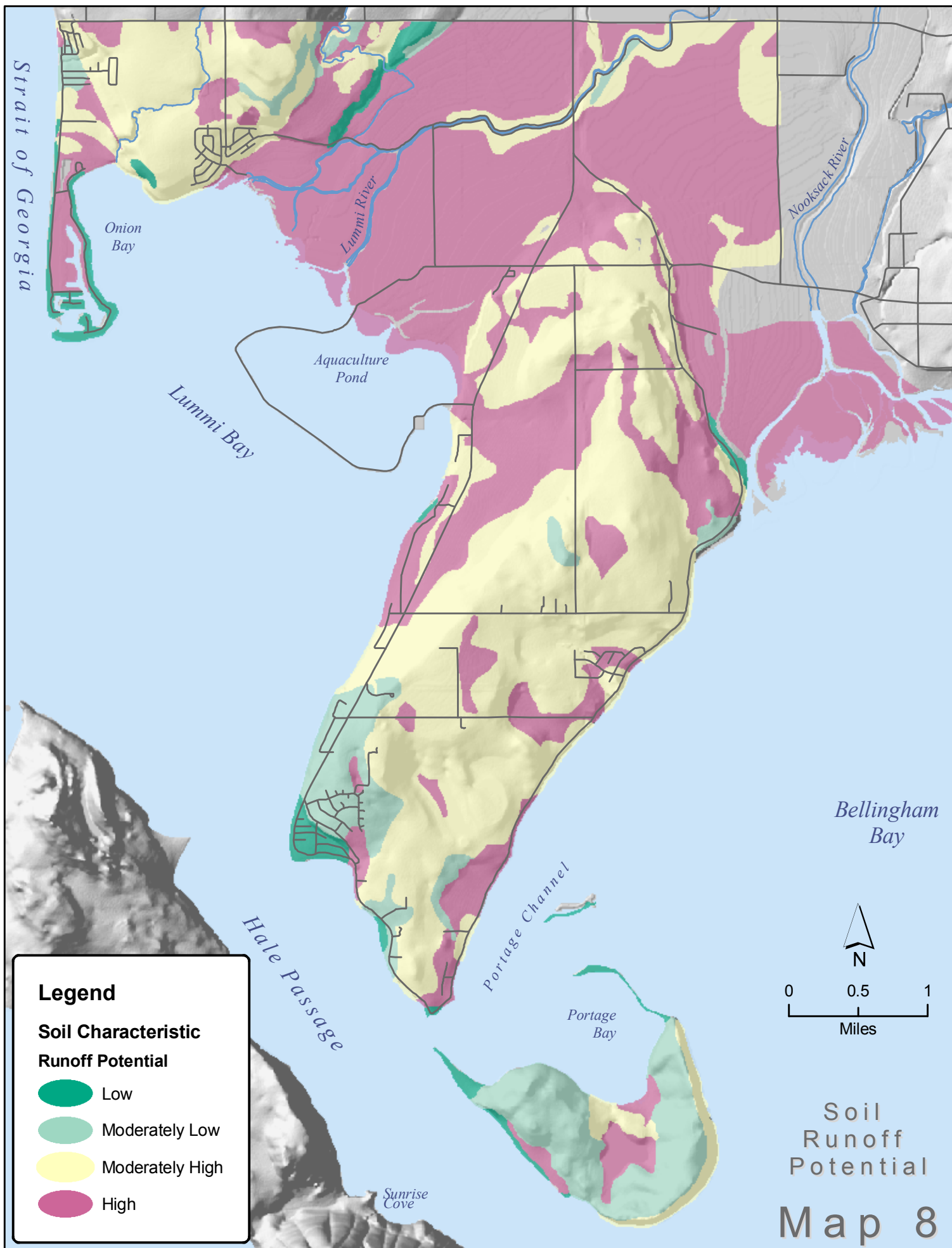
For more information, see the Lummi Reservation Storm Water Management Program Technical Background Document (LWRD 1998), which provides additional discussion of soil groups and runoff characteristics.

Hydrologic Soil Group	Description	Percent of Reservation Soils
A	Soils having high infiltration rates even when thoroughly wetted, consisting chiefly of deep (3-6+ ft) well to excessively drained sands (loamy sands, sandy loam, and sands) and/or gravel. These soils have a high rate of water transmission and a low runoff potential.	2.7
B	Soils having moderate infiltration rates when thoroughly wetted and consisting chiefly of moderately deep (20+ inches) and moderately well to well drained soils with moderately fine to moderately coarse textures (loam, silt loam). These soils have a moderate rate of water transmission and a moderately low runoff potential.	10.0
C	Soils having slow infiltration rates when thoroughly wetted consisting chiefly of 1) soils with a layer that impedes the downward movement of water, and 2) soils with moderately fine to fine texture (sandy clay loam) and a slow infiltration rate. These soils have a slow rate of water transmission and a moderately high runoff potential.	40.4
D	Soils having very slow infiltration rates when thoroughly wetted consisting chiefly of 1) clay soils with a high swelling potential, 2) soils with a high permanent water table, 3) soils with clay pan or clay layer at or near the surface, and 4) shallow soils over nearly impervious materials. These soils have a very slow rate of water transmission and a high runoff potential.	46.9

Lummi Water Resources Division (LWRD). 1998. Lummi Reservation Storm Water Management Program Technical Background Document. Prepared for Lummi Indian Business Council. Lummi Reservation, Washington. December.

U.S. Department of Agriculture-Soil Conservation Service (USDA). 1970. National Engineering Handbook, Section 4, Hydrology. USGPO, Washington.

U.S. Department of Agriculture-Soil Conservation Service (USDA). 1992. Soil Survey of Whatcom County Area, Washington.



## **Storm Water Facilities**

An inventory of storm water facilities on the Reservation was conducted during February and March 1997. Storm water facilities are defined as culverts, bridges, tide gates, catch basins, roadside ditches, and agricultural ditches. During the inventory, water was flowing in all or most of the roadside and agricultural ditches. Some of the facilities were completely underwater during initial visits and were revisited later in the year when the water had receded.

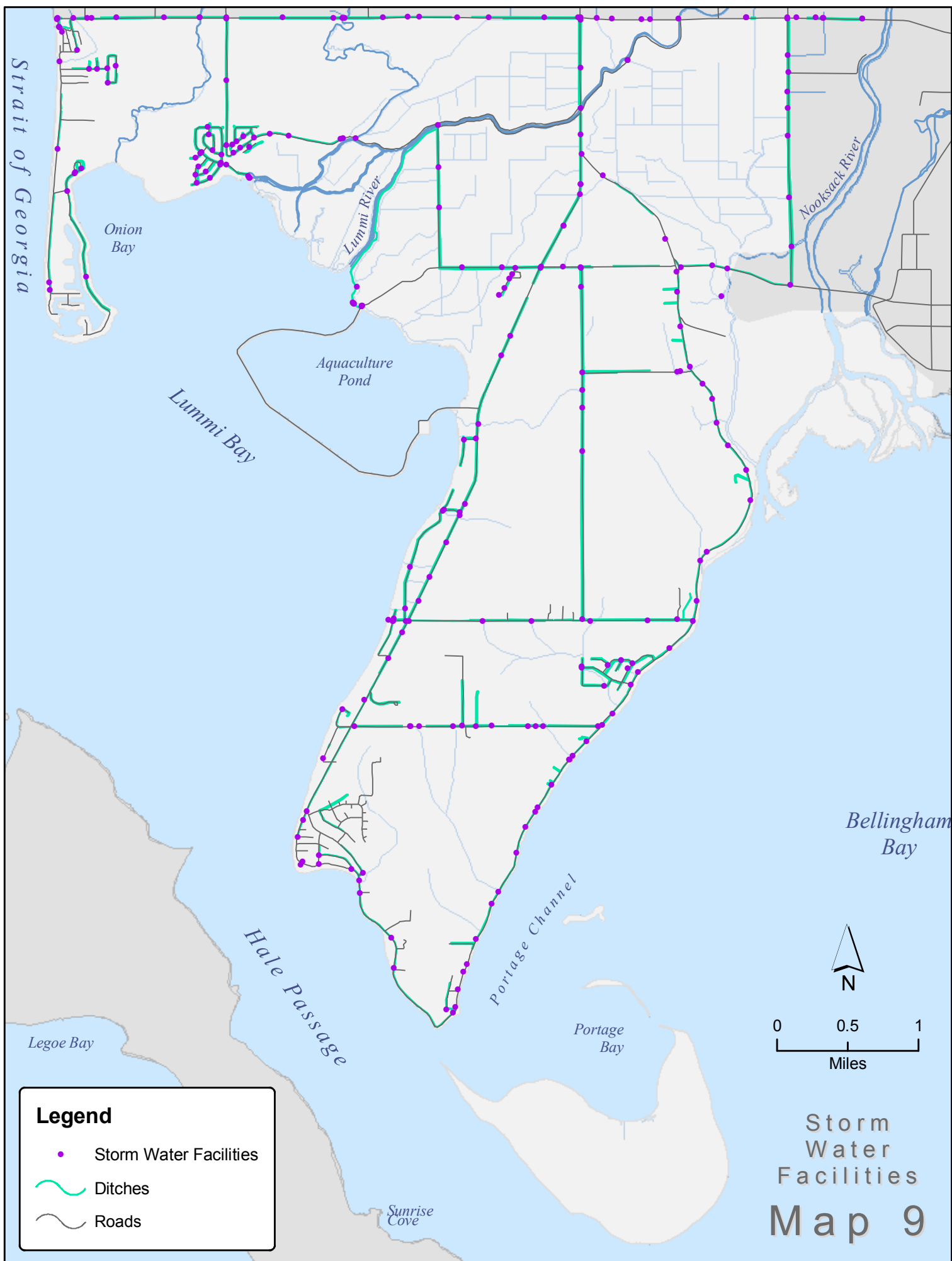
The purpose of the inventory was to:

1. Identify and map where culverts and bridges are located on the Reservation;
2. Identify and map the locations of roadside and agricultural ditches on the Reservation;
3. Describe the storm water facilities (i.e., diameter, material, condition); and
4. Identify the flow paths of water as it drains from upland areas and the flood plain to determine how each culvert or bridge is related to other culverts, bridges, roadside ditches, agricultural ditches, streams, sloughs, wetland areas, and marine waters.

Whatcom County is responsible for the maintenance of most of the roads and associated storm water drainage systems on the Reservation. Consequently, prior to starting the storm water facilities inventory, the field inventory data sheets and aerial photographs from the culvert inventory conducted by Whatcom County in 1984 were reviewed. Although this information was useful, because it was over 10 years old and a limited field verification effort suggested that some culverts were not accounted for, a new inventory was conducted. The new inventory also allowed the flow direction(s) in ditches and channels, as well as the interrelations between culverts, to be observed. The inventory indicated that at least 48 culverts along the upland parts of the Reservation discharge storm water directly to marine waters or to the flood plain.

The Lummi Reservation Storm Water Management Program Technical Background Document (LWRD 1998) provides a complete discussion of storm water facilities, quantity and quality. The report is available from the Natural Resources Department of the Lummi Indian Business Council.

Lummi Water Resources Division (LWRD). 1998. Lummi Reservation Storm Water Management Program Technical Background Document. Prepared for Lummi Indian Business Council. Lummi Reservation, Washington. December.



## **Wetland Areas**

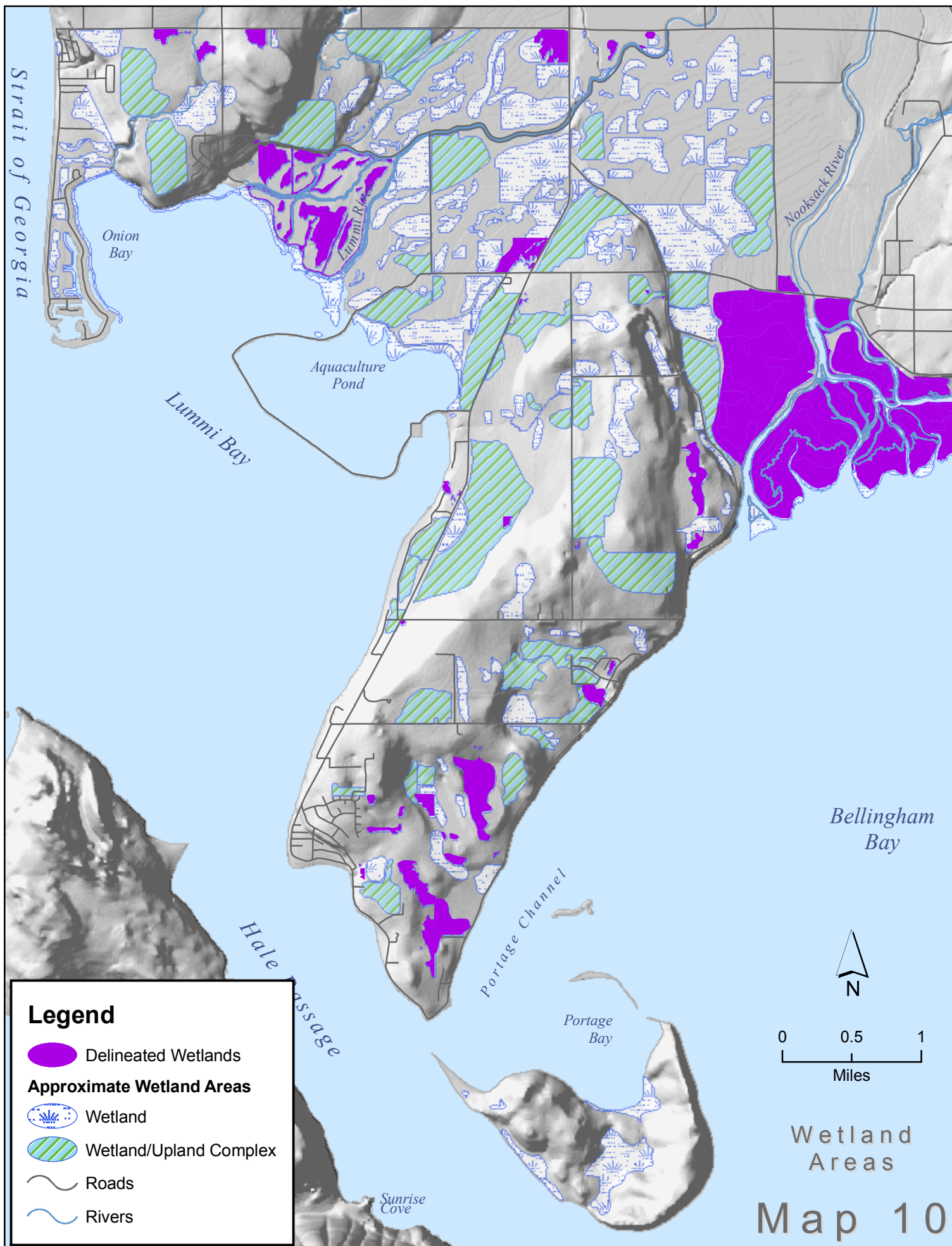
In 1999, the Lummi Natural Resources (LNR) staff, with training and oversight provided by Sheldon & Associates, completed an inventory of Reservation wetlands. Data were collected and analyzed in the spring and summer of 1999. The study resulted in a report providing baseline data on wetland location and characteristics in order to better inform wetland policy and future development planning. The report provides technical information that is used by LNR staff in making planning and management decisions to help protect and enhance the wetlands that are a commonly held resource of the Lummi Nation. During the study, 214 wetlands were mapped, totaling 5,432 acres, or roughly 43 percent of the land area of the Reservation, excluding tidelands. Approximately 60 percent of the Reservation wetlands are located in the Nooksack River and Lummi River floodplains. About 50 percent of the wetlands are over 10 acres in size, and 13 percent over 50 acres.

The 1999 comprehensive inventory of wetlands on the Lummi Reservation indicated that approximately 43 percent of the Reservation upland areas are either wetlands or wetland complexes. Wetland complexes are areas where wetlands form a highly interspersed mosaic with upland hummocks. Map 10 shows the outer boundary of the wetland complex and the entire area is labeled “wetland complex”. As a result, the estimated wetland area identified in the inventory represents more wetland area than actually exists.

The primary goal of the 1999 inventory was to locate every wetland on the Reservation, by aerial photograph interpretation (visible and near infra-red), map review, or direct field reconnaissance. Because some wetlands were only mapped using aerial photos, there is a continued effort to ground truth wetlands boundaries. LNR employs a wetland biologist assigned to survey wetland spatial boundaries. The wetland is recorded using GPS technology, and exported into a wetland GIS layer. This map shows the ground truthed wetland areas in purple. To date, 1,558 acres of wetlands have been ground truthed.

For additional information regarding the wetlands of the Lummi Indian Reservation see the Wetland Management Program Technical Background Report (LWRD 2000), available from the Natural Resources Department of the Lummi Indian Business Council.

Lummi Water Resources Division (LWRD). 1998. Lummi Reservation Storm Water Management Program Technical Background Document. Prepared for Lummi Indian Business Council. Lummi Reservation, Washington. December.

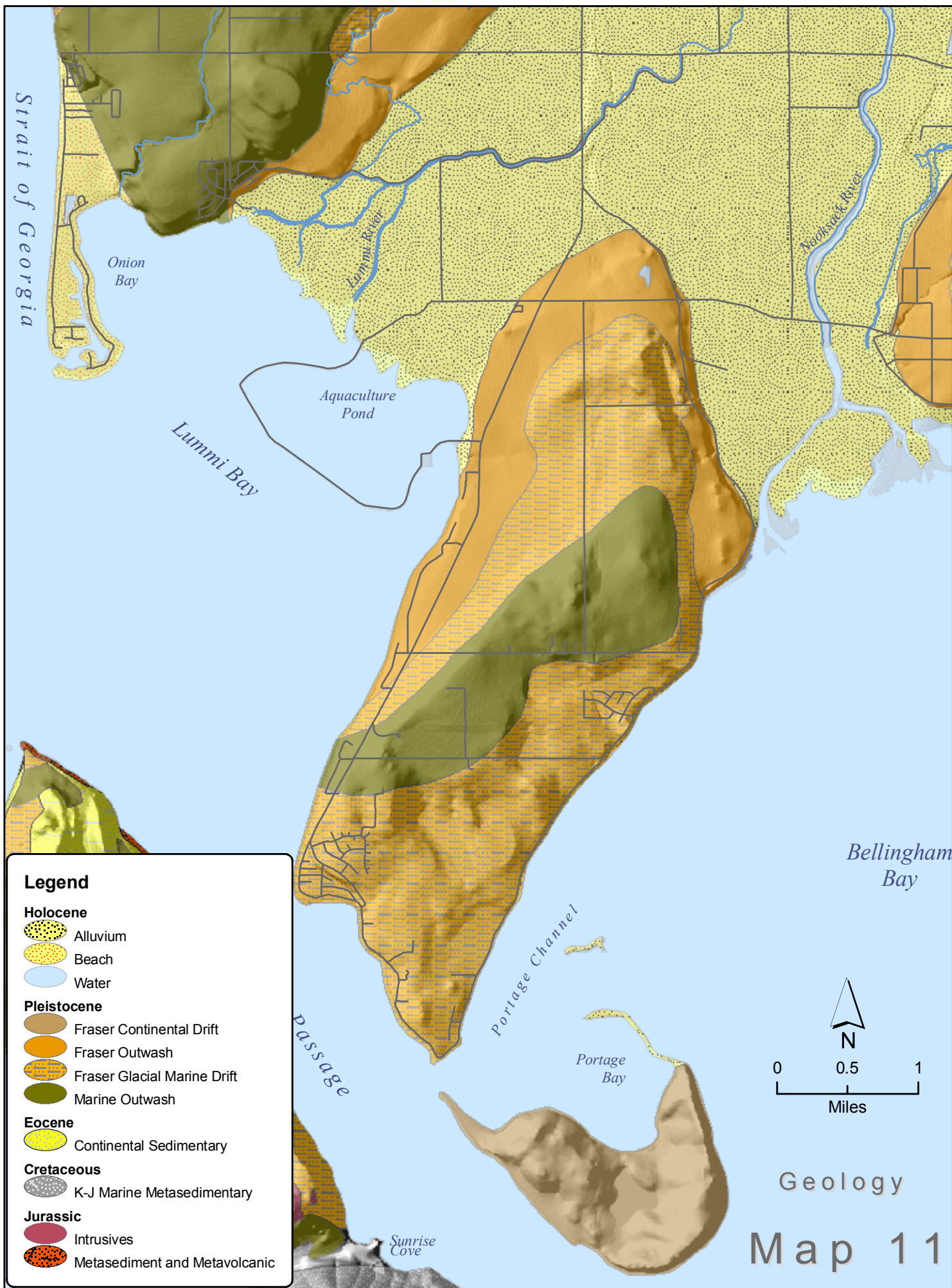


## Geology

The Lummi Reservation is comprised of Pleistocene (Ice Age) ocean and river deposits blanketed by more recent deposits from the Nooksack River. During the Pleistocene, sea level rose and fell dramatically as the climate changed and the earth's crust warped. Inundation by the seawater caused the glaciers to float and deposit layers of fine silt and clay, along with sand, gravel, and larger rocks that dropped from the melting ice. As sea level dropped and the glaciers receded, the water from the melting ice flowed across western Whatcom County and carried clay, silt, sand and gravel to the ocean. Once the glaciers had melted far enough, the Nooksack River occupied an old channel formed by the glacial melt-water and began depositing material on either side of the Lummi Peninsula (then an island). As the river delta grew, it connected the Lummi Peninsula to the mainland, resulting in physical geography that we observe today.

The geologic layers of the Reservation are summarized below, from youngest to oldest.

- **Alluvium:** The alluvium is derived from sediment carried by the Lummi and Nooksack rivers and deposited on the flood plain. It is comprised mostly of clay, silt, sand, and some gravel.
- **Beach Deposits:** The beach deposits are laid down by littoral drift processes. The deposits are mostly sand with some gravel and occur mainly at the western part of the Reservation from Neptune Beach to Sandy Point and at Gooseberry Point.
- **Older Alluvium:** The older alluvium was deposited by the Lummi and Nooksack rivers when the valley floor was relatively higher than at present. The unit consists mostly of fine sand with some silt and clay located on stream terraces flanking the uplands above the flood plain. These deposits occur along the southeast flank of the Mountain View Upland and the northeast flank of the Lummi Peninsula.
- **Gravel:** A thin unsaturated gravel unit is exposed at the surface at several locations on the Reservation. The unit consists of gravel and sand/gravel. In places, this unit appears to have been reworked by beach processes during post-glacial uplift and overlies glaciomarine drift.
- **Glaciomarine Drift:** The Glaciomarine Drift unit was deposited late in the Fraser Glaciation (from about 20,000 years ago to about 10,000 years ago [Easterbrook 1973]). The drift is comprised of unsorted clay, silt, sand, gravel, and some cobbles and boulders. The deposits include both Kulshan and Bellingham drifts.
- **Glacial Till:** The glacial till from the Vashon Stade of the Fraser Glaciation is comprised of poorly sorted clay, silt, sand, gravel, and some cobbles and boulders. Because the presence of till is noted in only a few well logs and has been observed at only a few locations along the Lummi Peninsula bluffs, the occurrence of till is believed to be limited.
- **Esperance Sand:** The Esperance Sand unit (Easterbrook 1976), formerly named Mountain View Sand and Gravel, is advance outwash comprised of stratified beds of sand and gravel with stratified lenses of sand. The unit overlies the Cherry Point Silt unit and underlies the glaciomarine drift and till; it is the major water-yielding unit beneath the Reservation.
- **Cherry Point Silt:** The Cherry Point Silt unit is the oldest known unconsolidated stratigraphic unit in the northern Puget Sound lowland. This unit is comprised of a thick sequence of blue to brownish gray stratified clay and silt with minor sandy beds.
- **Bedrock:** Bedrock underlying the Reservation consists mostly of sedimentary rocks such as sandstone, siltstone, shale, and conglomerate. The bedrock is deeply buried by unconsolidated glacial deposits.



## Ground Water Characteristics

The information displayed on map 12 came from a report titled “A Ground-water Investigation on the Lummi Indian Reservation” published by the US Geological Survey (USGS) in 1974 as an Open File Report, and a water quality evaluation conducted by a hydrogeologic consultant (Golder 1992).

This map is adapted from Figure 4 of the document, titled “Areas of fresh and salty ground water in study area,” with modifications by Golder and Associates (Golder 1992).

The following excerpt is taken directly from the USGS report (Cline 1974):

*The investigations showed that both fresh and salty ground water underlie the reservation. This water is sometimes stratified, with the freshwater lying above the salty water.... Although serious saltwater intrusion has not yet been detected on the reservation, some wells may be showing the first signs of it, such as at Gooseberry Point. There, the chloride content of the water from the two public-supply wells has been slowly increasing, from 24 milligrams per liter in 1968 to 110 milligrams per liter in 1972. Increased ground-water withdrawals in the future on the reservation will increase the chances of saltwater intrusion. The quantity of ground water withdrawn on the reservation in 1972 was about 41 million gallons, about double that in 1965.*

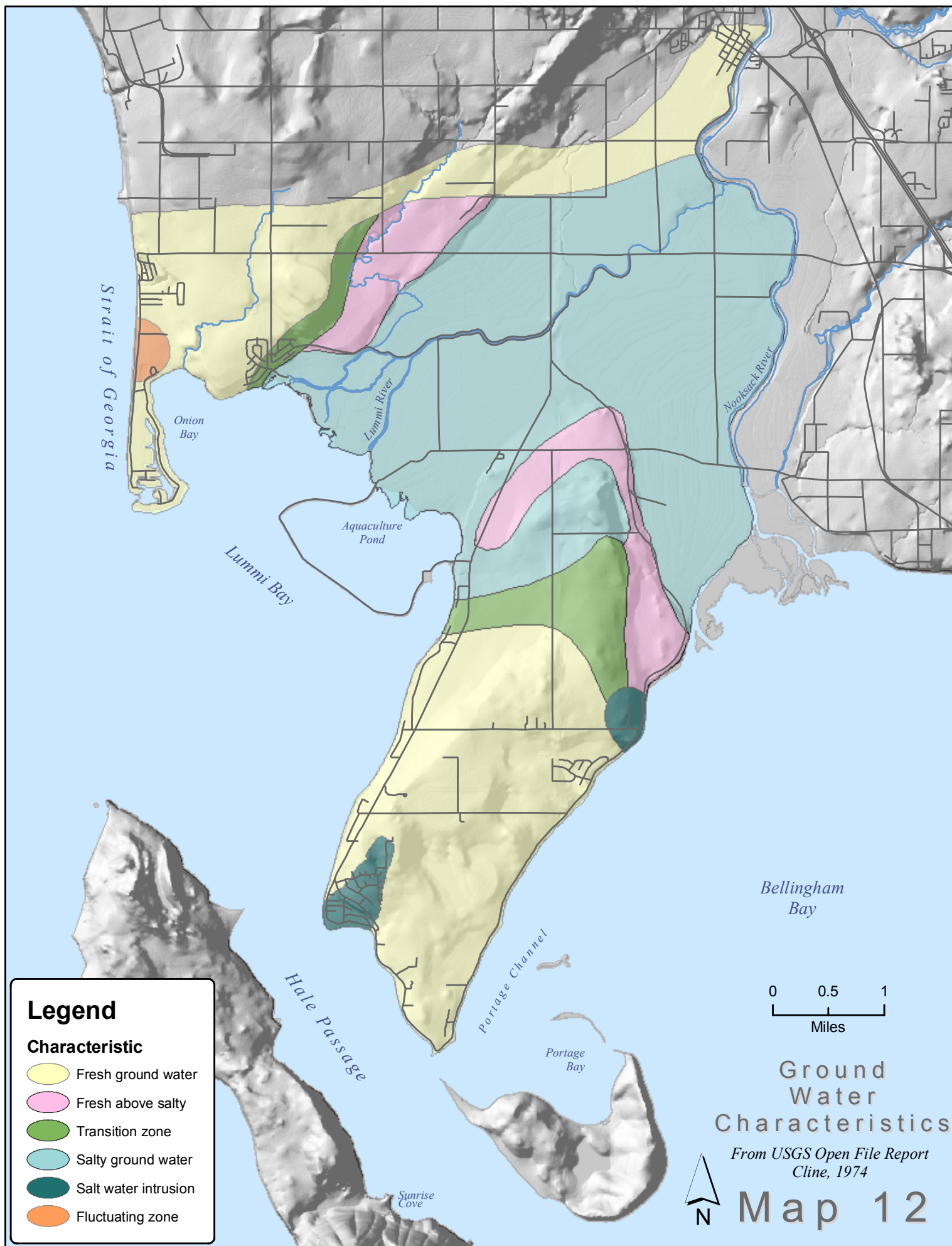
The conclusion in the 1992 report by Golder Associates, Inc., titled “Report to LIBC on Water Quality Evaluation of the Lummi Indian Reservation” included:

*Intrusion of saline marine waters (defined as having chloride concentrations greater than 250 mg/L) into the freshwater aquifer on the Lummi Peninsula is increasing in the Gooseberry Point area as compared to a previous USGS investigation in 1971, and is moving inland towards the MacKenzie-1 well.*

*Preventative management of groundwater within the Lummi Reservation is recommended to maintain present groundwater quality in existing production wells. It is clear that the water quality at the major pumping center on the Peninsula ...is threatened by saline intrusion.*

Cline, D.R. 1974. A ground water investigation of the Lummi Indian Reservation area, Washington. Tacoma, U.S. Geological Survey, Open-File Report. 66 p.

Golder and Associates, Inc (Golder). 1992. Water Quality Evaluation of the Lummi Indian Reservation. Report prepared for the Lummi Indian Business Council. 15 p.



## Well Classification

The information for Map 13 came from a report titled, “A Ground-Water Investigation on the Lummi Indian Reservation” published by the US Geological Survey (USGS) in 1974 as an Open File Report (Cline 1974).

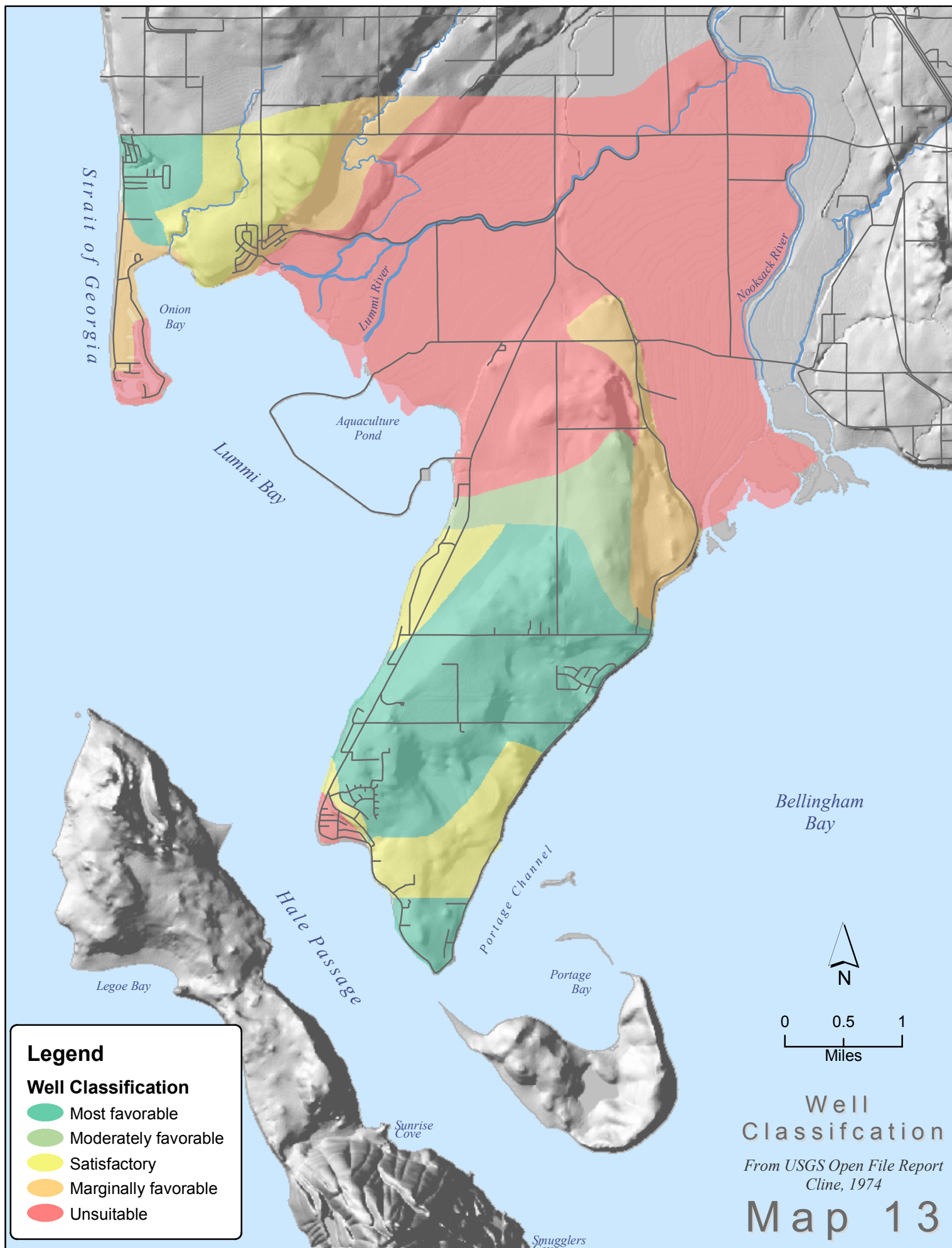
This map is a reproduction of Figure 6 from the document, titled, “Areal availability of fresh ground water.”

The following excerpts are taken directly from the report:

*The two areas which appear to be the most favorable for developing fresh ground-water supplies—based on subsurface geology, present well yields, water levels, and water quality – are near Neptune Beach in the northwestern part of the reservation and in the south-central part of the Lummi Peninsula....*

*The three areas that are unsuitable for the development of even very limited supplies of fresh ground water are generally underlain by salty ground water. In some places, such as at Sandy Point, if the ground water is not already salty, there is a great potential for saltwater intrusion to occur with the pumping of any well. In addition to the problem of poor-quality ground water, wells yield little or no water in some places, such as at Gooseberry Point.*

Cline, D.R. 1974. A ground water investigation of the Lummi Indian Reservation area, Washington. Tacoma, U.S. Geological Survey, Open-File Report. 66 p.



## **Wells**

Wellheads and/or the ground water resources on the Reservation, have been inventoried by the U.S. Geological Survey (USGS) and others on several occasions since the late 1940s (Newcomb et al. 1949, Washburn 1957, Cline 1974, Charles Howard and Associates 1991, Golder 1992, and Drost 1996). The information from these inventories, along with information collected by the Lummi Natural Resources Department Water Resources Division staff since 1991, was used to identify the wellhead locations on the Reservation. In addition, information from the previous USGS work and well logs obtained from the Washington State Department of Ecology were used to identify the locations of wells north of the Reservation in the watersheds that contribute surface water to the Reservation. Wells located beyond the exterior boundaries of the Reservation were inventoried because they may share an aquifer serving the Reservation. See the Lummi Nation Wellhead Protection Program report (LWRD 1997) for more information.

## **Wellhead Protection Areas**

The Federal Safe Drinking Water Act requires that all federally defined public water systems using ground water as their source implement a wellhead protection program. The goal of the program is to prevent contamination of the ground water used by public water systems. The Lummi Nation Wellhead Protection Program (LWRD 1997) includes the following elements:

- A completed susceptibility assessment;
- A delineated wellhead protection area for each well, well field, or spring;
- An inventory within the wellhead protection area of all potential sources of contamination that may pose a threat to the water bearing zone (aquifer) utilized by the well, spring, or well field;
- Contingency plans for providing alternate sources of drinking water in the event that contamination does occur; and
- Coordination with local emergency responders for appropriate spill/incident response measures.

Charles Howard and Associates Ltd. 1991. Ground water resource evaluation, Lummi Reservation Phase 1 Report. Report prepared for the Lummi Indian Business Council.

Cline, D.R. 1974. A ground water investigation of the Lummi Indian Reservation area, Washington. Tacoma, U.S. Geological Survey. Open-File Report.

Drost, B.W. 1996. Selected ground water data for the Lummi Indian Reservation, Whatcom County, Washington, 1995. Tacoma, U.S. Geological Survey Open-File Report 96-166. 21 p.

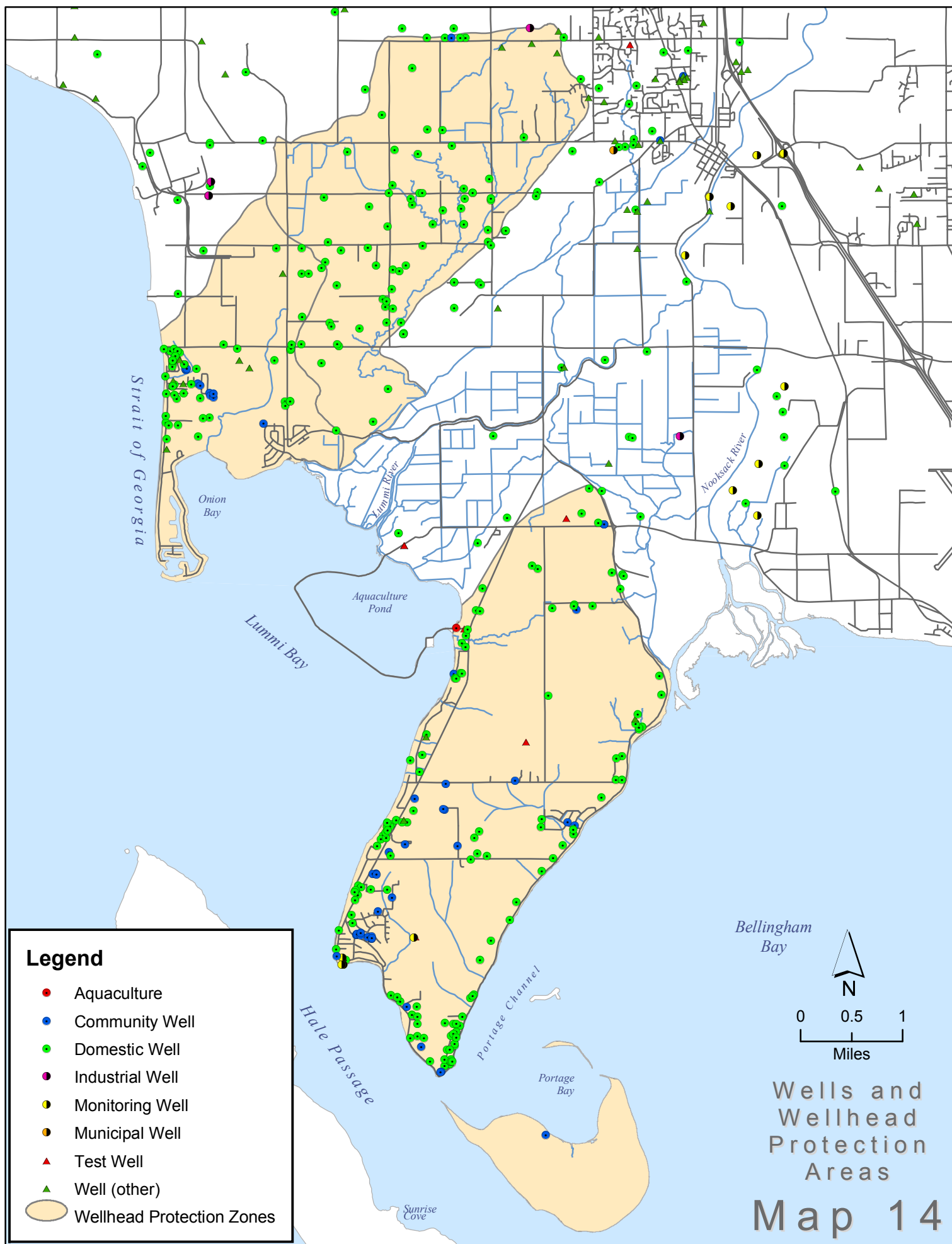
Golder and Associates, Inc (Golder). 1992. Water Quality Evaluation of the Lummi Indian Reservation. Report prepared for the Lummi Indian Business Council. 15 p.

Lummi Water Resources Division (LWRD). 1997. Lummi Nation Wellhead Protection Program --Phase I. Prepared for Lummi Indian Business Council. Lummi Reservation, Washington. November.

Lummi Water Resources Division (LWRD). 1997. Lummi Nation Wellhead Protection Program --Phase II. Prepared for Lummi Indian Business Council. Lummi Reservation, Washington. November.

Newcomb, R.C., J.E. Sceva, and O. Stromme. 1949. Ground water resources of western Whatcom County, Washington. U.S. Geological Survey. 134p.

Washburn, R.L. 1957. Ground water in the Lummi Indian Reservation, Whatcom County, Washington. Tacoma, U.S. Geological Survey, Open-File Report. 31 p.



## Eelgrass and Forage Fish Habitat

Eelgrass is a keystone species in the nearshore and estuary environment, playing many important roles that build habitat and perpetuate the food web. Eelgrass provides living space and structure for many aquatic species that grow on or among its blades, on its roots, or in the stabilized substrate it colonizes. Dense eelgrass beds serve as a refuge from predators for small fish and invertebrates. Many commercial and recreationally important species, such as herring (*Clupea pallasii*), Dungeness crab (*Cancer magister*), and juvenile salmon (*Onchorhynchus* spp.) use eelgrass as a nursery area. Herring spawn on eelgrass, laying as many as three million eggs on a single blade in the spring (Hood and Zimmerman 1986, cited in ADFG 2004).

Eelgrass beds occur in shallow water, near the shore, and are therefore threatened by some types of coastal development activities (ADFG 2004). The plant is vulnerable because it has a narrow tolerance for turbidity, sediment disturbance, and eutrophication, as well as a need for high ambient levels of light. Sedimentation and water quality impacts from coastal development and logging contribute to turbidity. Excess nutrients from wastes, fertilizers, or other sources promote the growth of epiphytic algae on eelgrass and phytoplankton in the water column (ADFG 2004). Decreased light penetration reduces eelgrass photosynthesis and growth. Changes in sedimentation patterns, propeller-wash from boats, and other physical disturbances can smother or uproot eelgrass from the fine sediments in which it grows.

Eelgrass beds occur along many of the marine shorelines of the Lummi Reservation, particularly in Portage Bay, along Hale Passage, and in Lummi Bay. These areas are an important migratory corridor for juvenile salmon originating in the Nooksack watershed and support the Dungeness crab fisheries in nearby water. Nearshore habitat along Sandy Point up to Point Whitehorn serves as another valuable corridor to eelgrass meadow habitat at Cherry Point. Cherry Point eelgrass habitat once sustained the largest fishery of pacific herring (*Clupea pallasii*) in Puget Sound. Herring eggs, larvae, and juveniles comprise over 60% of juvenile chinook salmon diet in the nearshore (Fisheries and Oceans Canada, found in Bargman 2001). Cherry Point herring have declined 94% in the past 20 years (Bargman 2001).

Forage fish species constitute a significant part of the marine food web, being particularly important as prey for fish species including salmonids, marine mammals, and seabirds. Forage fish use a variety of shallow nearshore and estuarine habitats for spawning, feeding, and rearing. Surf smelt and Pacific sand lance both spawn within a limited range of tidal elevations in the upper intertidal zones of beaches. Suitable spawning habitat for these species is therefore limited within the region, and these two species are particularly vulnerable to shoreline modifications and development.

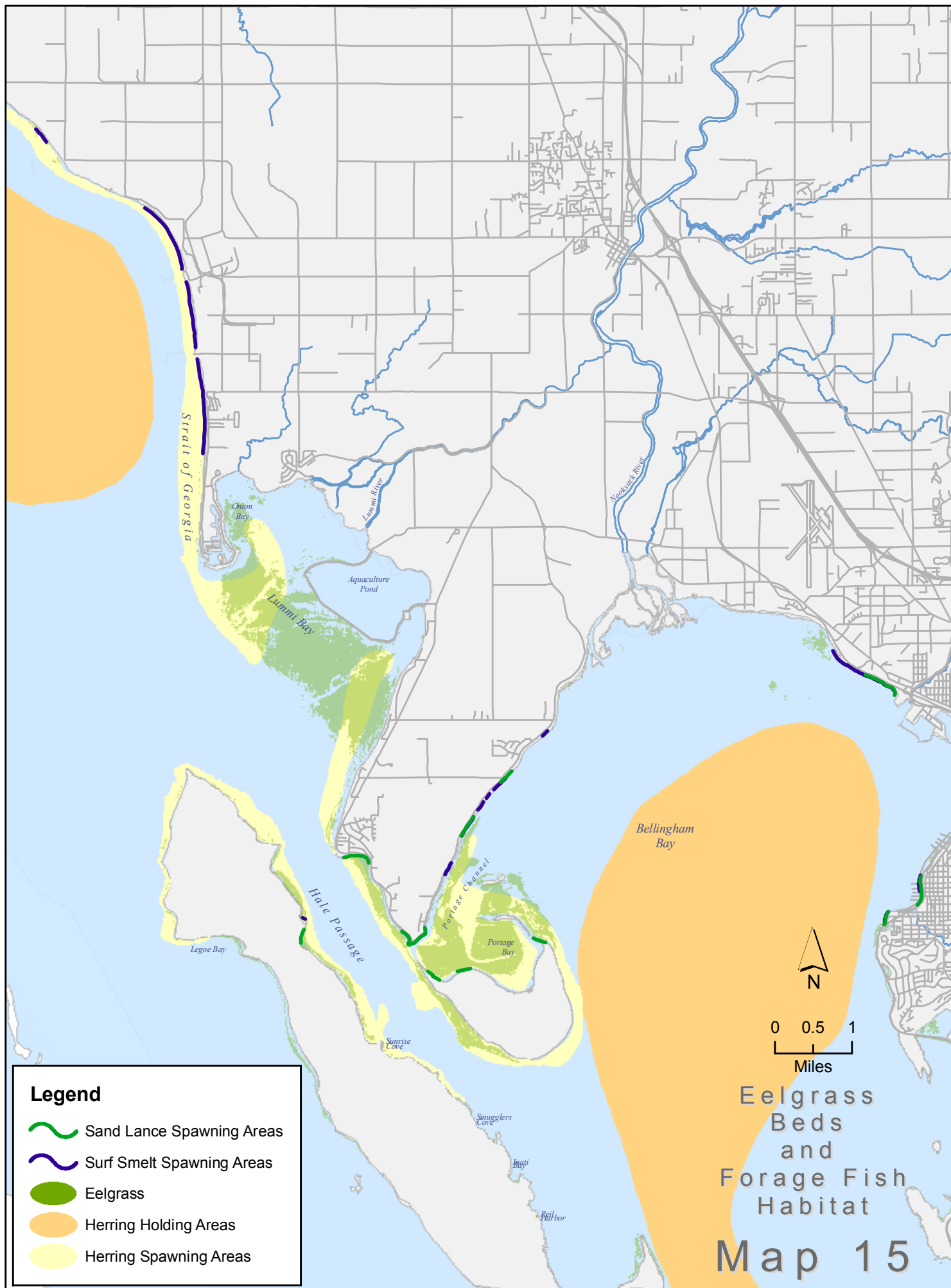
ADFG (Alaska Department of Fish and Game). 2004. Ecosystem Description: Estuarine Environments. [http://www.habitat.adfg.state.ak.us/geninfo/kbrr/coolkbayinfo/kbec\\_cd/html/ecosys/estuarin/eelgrass.htm](http://www.habitat.adfg.state.ak.us/geninfo/kbrr/coolkbayinfo/kbec_cd/html/ecosys/estuarin/eelgrass.htm)

Bargman, G. 2001. WDFW Studies the Cause of Cherry Point Herring Decline. In: Fish and Wildlife Science. WDFW online science magazine: <http://wdfw.wa.gov/science/articles/herring/>

Ricketts, E. F. and J. Calvin. 1968. Between Pacific Tides. 4th ed. Hedgpeth, J. W. ed. Stanford University Press. Stanford, CA. pp. 614.

WDFW (Washington Department of Fish and Wildlife), <http://wdfw.wa.gov/fish/forage/smelt.htm>

WDFW (Washington Department of Fish and Wildlife), <http://wdfw.wa.gov/fish/forage/lance.htm>



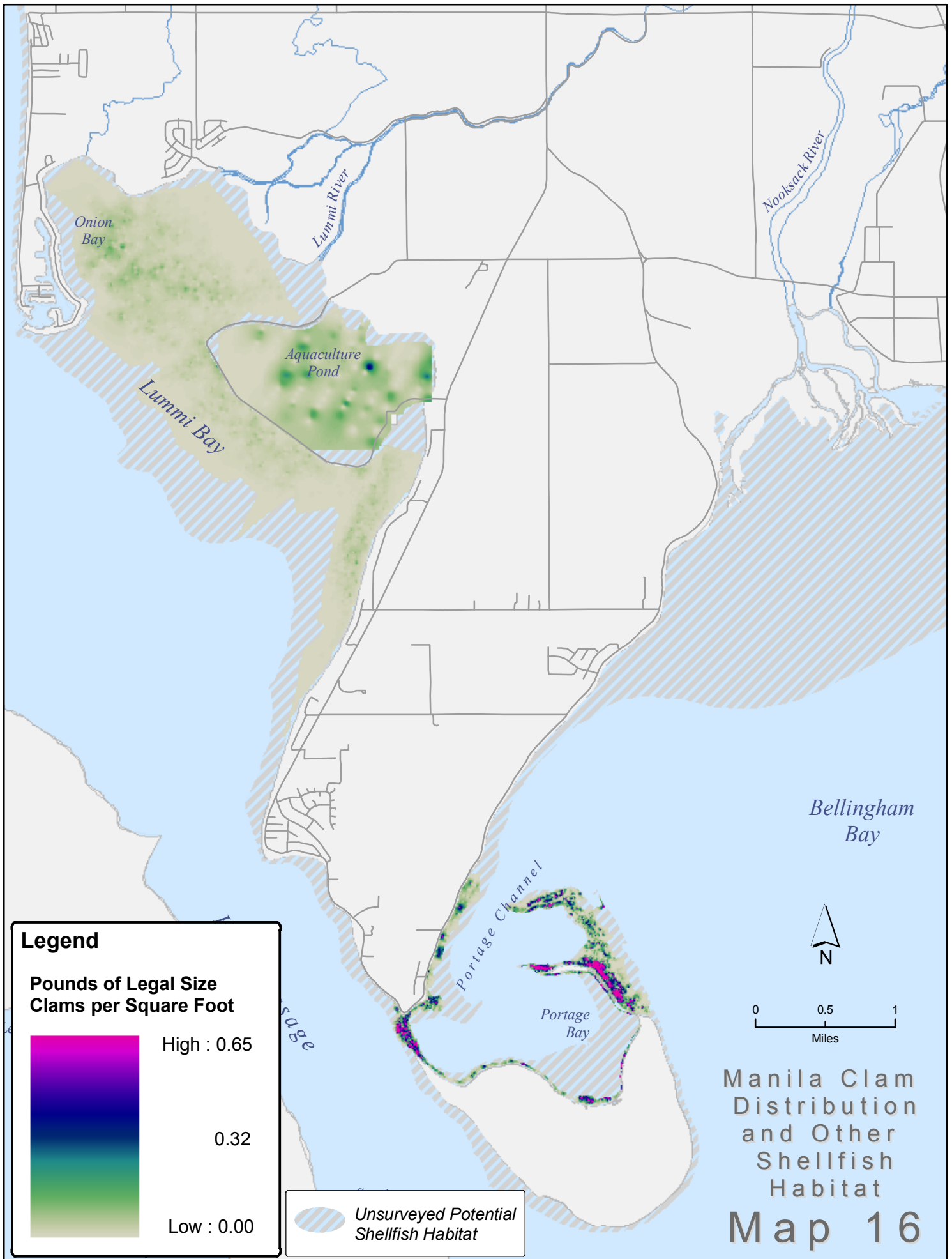
## **Manila Clam Distribution**

Manila clams provide an important economic resource to many tribal members. Peak annual harvests from intertidal Reservation beaches alone reached 400,000 lbs of Manila clams in 2002. Significant quantities of Manila clams are also harvested from the Lummi Seapond in Lummi Bay. Peak harvests in the Seapond reached as high as 300,000 lbs in 1999.

Manila clam surveys are conducted by staff from the Lummi Natural Resources department. Clam surveys involve digging hundreds of sample holes on each beach and counting and measuring the Manila clams found in the survey holes. Surveys are conducted to assess the wild stock status and help harvest managers set sustainable harvest targets for each beach that will ensure the future of the resource. Survey data shows that over 1 million pounds of Manila clams are present in Lummi Bay and a further 300,000 pounds are present in beaches in Portage Bay.

Map 16 shows the known distribution, and relative abundance of manila clams on surveyed Reservation beaches, and in the Lummi Seapond, based on clam survey data from 2002 through 2005. The data in the map was computer generated from 9,150 individual sample plots that ranged in size from 2.25 ft<sup>2</sup> (Portage Bay beaches) to 9 ft<sup>2</sup> (Lummi Bay beaches) each. Some portions of the Reservation have not yet been surveyed for manila clams, including the eastern and southern margins of Portage Island. However, the majority of Manila clams on the Reservation are found on the surveyed beaches.

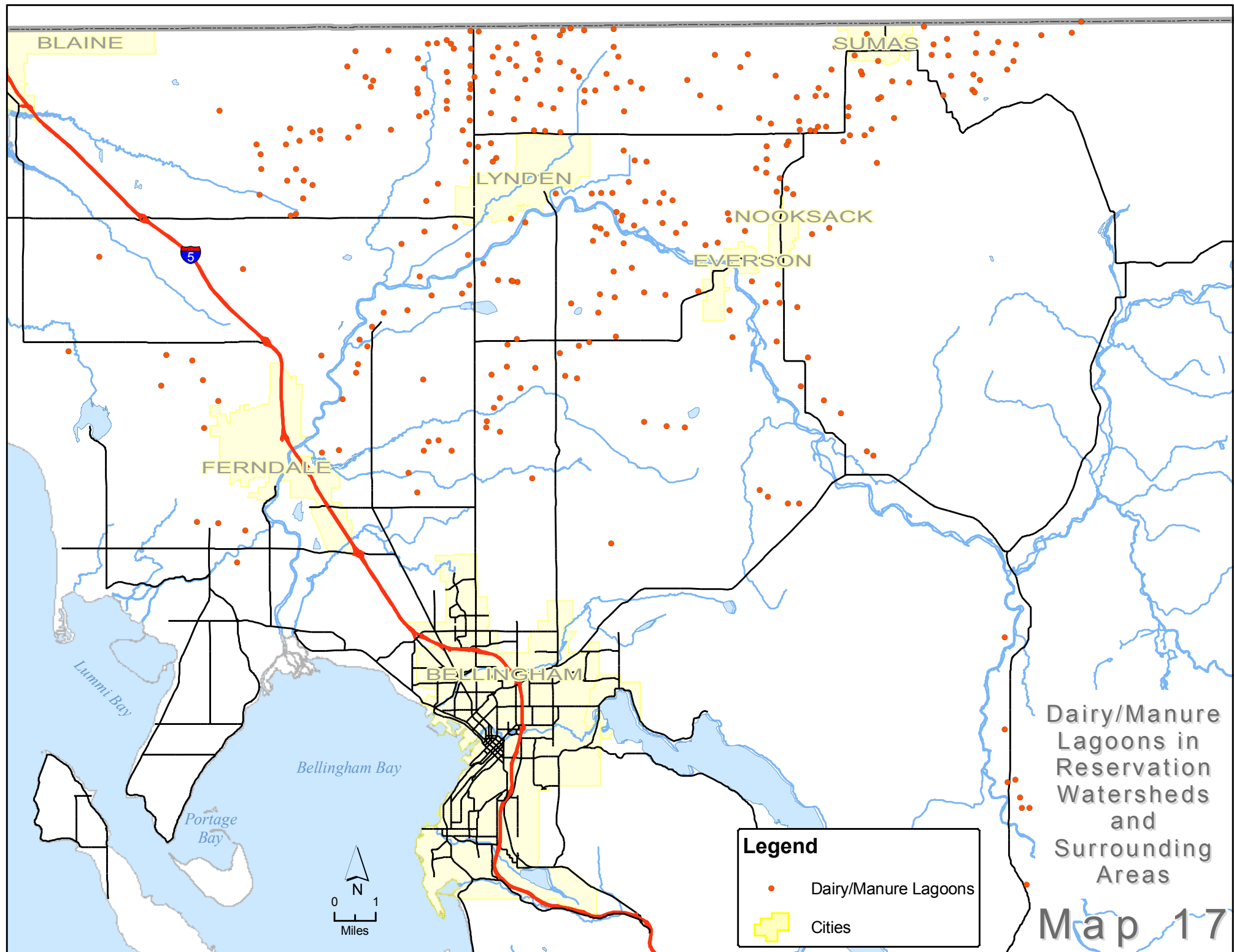
In addition to Manila clams, Reservation tidelands contain harvestable volumes of Pacific Oysters, Purple Varnish Clams, Horse Clams, Butter Clams, Dungeness Crab, native Littlenecks, and Cockles. These resources are found along the southern edge of Portage Island, in Portage Bay and Portage Channel, in Lummi Bay, and along the southern point of Sandy Point.



## **Dairy/Manure Lagoons in Reservation Watersheds and Surrounding Areas**

The tribal commercial shellfish enterprise and the commercial, subsistence, and ceremonial harvest of shellfish by the Lummi Nation and individual members in Portage Bay was severely impacted by the closure of 60 acres of tidelands in 1996, and 120 additional acres in 1997. These closures in Portage Bay were largely attributed to poor dairy waste management practices in the Nooksack River watershed (DOH 1997). Not considering the multiplier effects on the economy, the lost value of the shellfish products alone was estimated to be approximately \$825,000 per year. In response to the 1996 closure, the EPA conducted compliance enforcement inspections of dairy operations in the Nooksack River watershed starting in 1997, the State of Washington passed the 1998 Dairy Nutrient Management Act (RCW 90.64), and dairy farmers developed and implemented nutrient management plans (a.k.a. farm plans). As a result of these reactions and additional compliance inspections by the Washington Department of Ecology (Ecology), water quality in the Nooksack River improved. In November 2003, approximately 75 percent of the previously closed shellfish beds in Portage Bay were reopened to commercial harvest. However, after the Department of Ecology planned to eliminate their livestock program (which supported the dairy waste inspections), the compliance inspection responsibilities were transferred to the Department of Agriculture in July 2003. Water quality in the Nooksack River and Portage Bay declined during 2004 and additional shellfish growing areas in Portage Bay were closed temporarily in January 2005. After additional actions by the Department of Agriculture and others during 2005, water quality has improved again and, if the improved water quality is maintained, all of the Portage Bay shellfish beds may be reopened in early 2006.

Washington State Department of Health (DOH). 1997. Report: Sanitary Survey of Portage Bay. Office of Shellfish Programs, Olympia, Washington. August. 30 p.



## Bald Eagles

Bald eagles (*Haliaeetus leucocephalus*) occur in Western Washington throughout the year as both resident and wintering populations. Bald eagles prefer nesting sites that include proximity to water with an adequate food source, large trees with sturdy branching at sufficient height for nesting, and stand heterogeneity both vertically and horizontally.

Thirty-three bald eagle nests have been identified within the boundaries of the Lummi Reservation. In addition to the resident eagle population, Portage Island and the Lummi Peninsula shoreline serve as important roosting grounds for migrating birds. During the winter months, roosting colonies are a common sight throughout the Reservation.

Resident, non-breeding, and wintering bald eagles utilize the areas around the Lummi Peninsula. Significant shallow near-shore habitat provides a large productive foraging area from the Nooksack River estuary to Sandy Point. Georgia Strait and Hale Passage provide excellent shoreline habitat and foraging opportunities for bald eagles including seasonal herring, salmon, and waterfowl concentrations. Anadromous fish including salmon associated with the Nooksack River system and resident marine fish including spawning sand lance and surf smelt occur in the shallow near-shore habitats and provide a substantial year-round food source for bald eagles in this area. Upland forest and individual mature shoreline trees such as black cottonwood, grand fir, and Douglas fir provide suitable nest and perch trees.

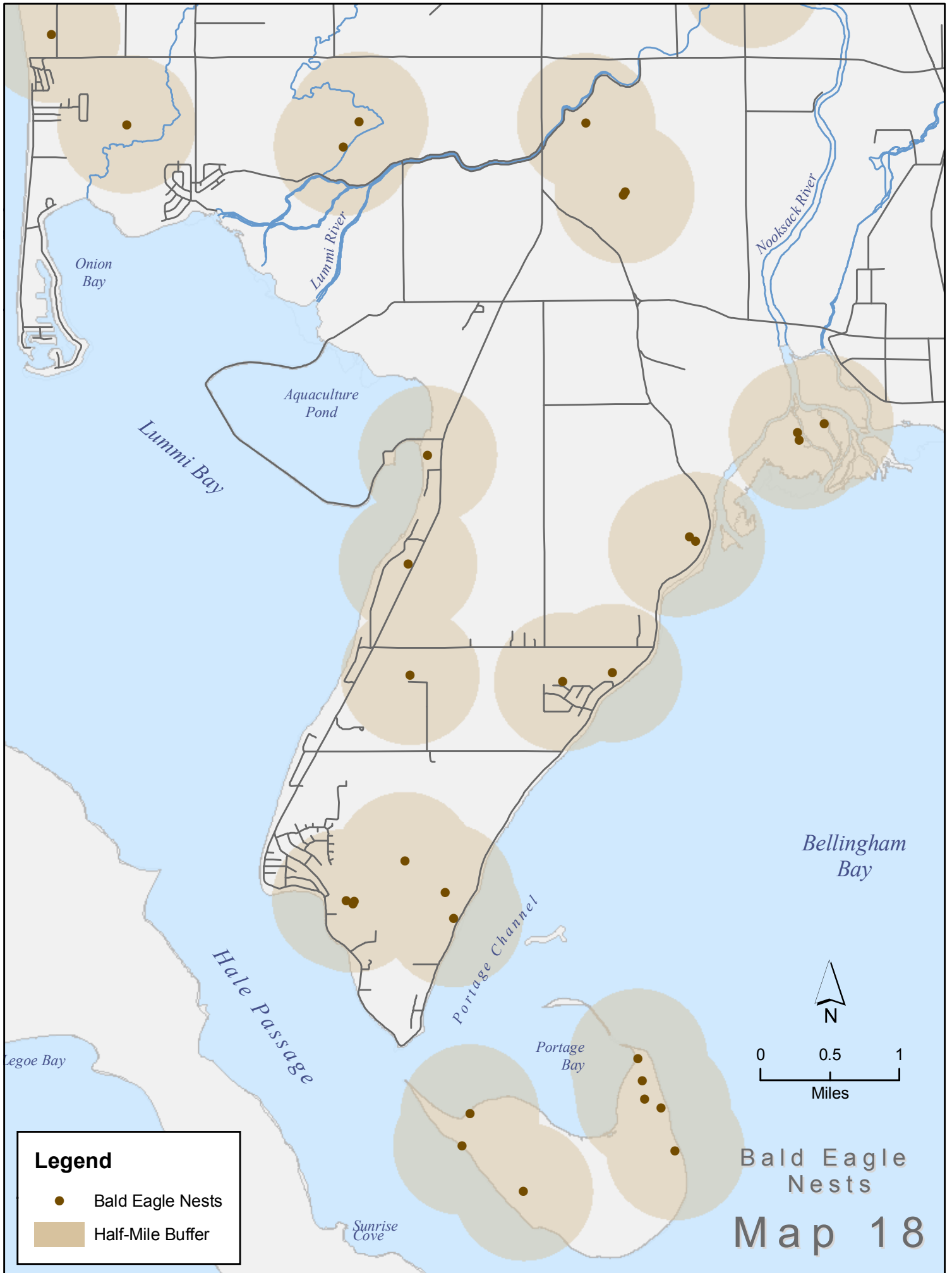
The recognition of bald eagles as an important cultural asset is formalized in Lummi Tribal Code 15.07.030, which mandates the protection of tribal resources and cultural values through compliance with several Federal laws including the Endangered Species Act. This commitment to ensure healthy eagle populations is a priority to tribal administrators, and achieved through cooperation with the U.S. Fish and Wildlife Services, Washington Department of Fish and Wildlife, Lummi Natural Resources, and Lummi Planning and Development.

In order to promote the safety and welfare of the eagle population, consistent with U.S. Fish and Wildlife Services management guidelines the Lummi Nation places a one-half-mile development buffer around all nests. Logging, construction, and utilities projects are restricted within these buffer zones during the nesting season. In addition to these restrictions, land use decisions within nest buffer zones are considered on a case-by-case basis with respect to their impact on the eagle population. For more information regarding eagles in general, up-to-date map layers, or specific detail on tribal policies, contact the Lummi Natural Resources Department or reference the web links below.

<http://endangered.fws.gov/i/b/msab0h.html>

<http://endangered.fws.gov/i/B0H.html>

[http://www.lummi-nsn.gov/natural\\_resources.html](http://www.lummi-nsn.gov/natural_resources.html)



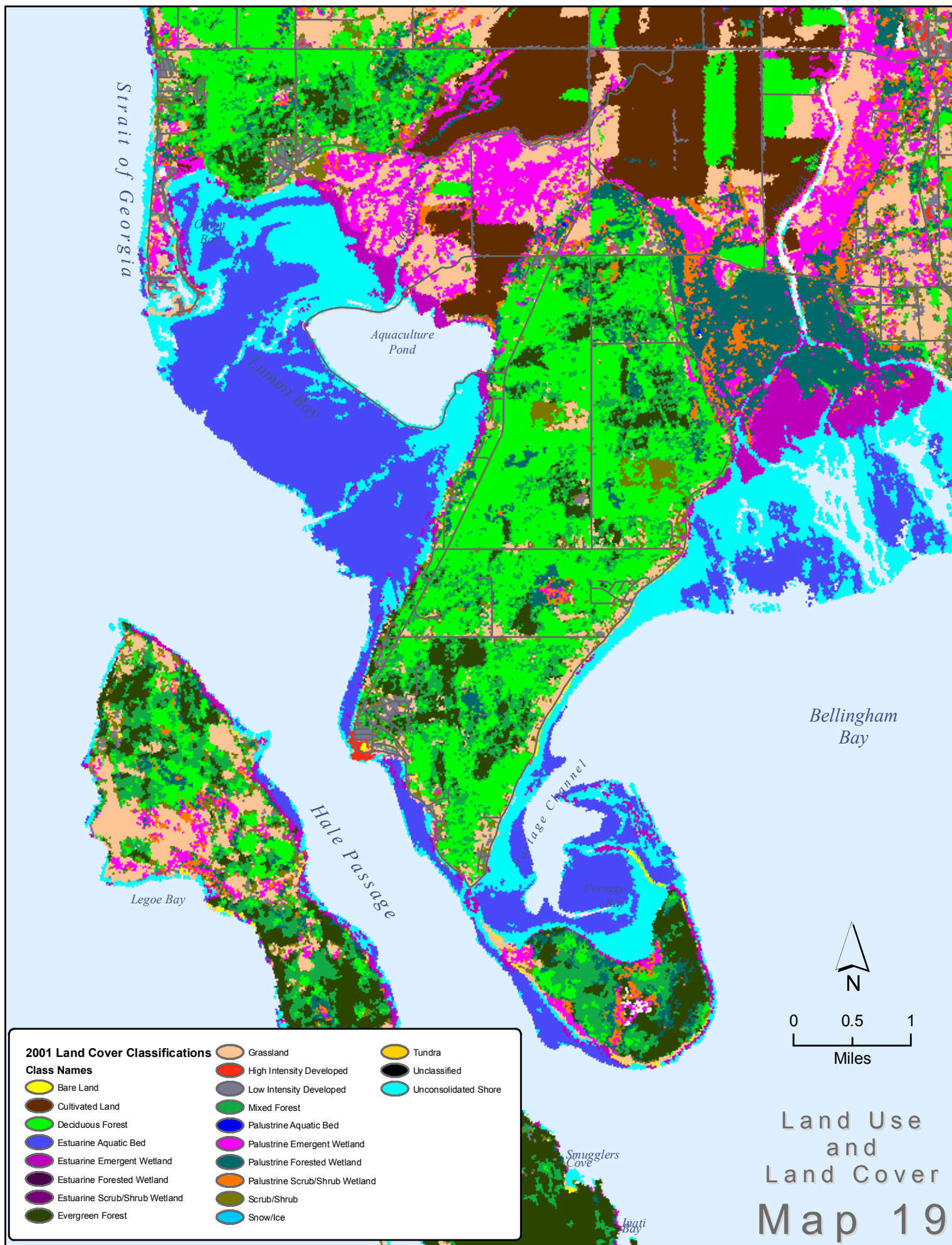
## Land Use and Land Cover

The Reservation land use and land cover data set consists of about 33 full or partial Landsat 7 Thematic Mapper (TM) scenes collected between October 1999 and February, 2002, which were analyzed according to the Coastal Change Analysis Program (C-CAP) protocol to determine land cover. The C-CAP is used to improve the understanding of coastal uplands and wetlands, and their linkages with the distribution, abundance, and health of living marine resources. The spatial resolution (pixel size) of the Landsat image is 30 meters x 30 meters.

The categories on Map 19 are:

- High Intensity Developed - Urban Land Cover with greater than 75 percent impervious surface
- Low Intensity Developed - Urban land cover with greater than 25 percent and less than 75 percent impervious surface
- Cultivated land - Active agriculture, orchards, and vineyards
- Grassland - Both managed and managed grasslands
- Deciduous Forest - Hardwood forest with a pronounced seasonal dormancy period
- Evergreen Forest - Forest without a pronounced seasonal dormancy period
- Mixed Forest - Forest not dominated by either deciduous or evergreen species
- Scrub/Shrub - Woody vegetation less than 20 feet tall
- Palustrine Forest - Freshwater wetland forest
- Palustrine Scrub/Shrub - Freshwater wetland scrub/shrub
- Palustrine Emergent - Freshwater wetland-rooted emergent species (marsh, lilies, etc.)
- Estuarine Forest - Saltwater wetland forest greater than 20 feet (mangrove)
- Estuarine Scrub/Shrub - Saltwater wetland scrub/shrub (mangrove)
- Estuarine Emergent - Saltwater wetland emergent species (Spartina marsh, juncus grass, etc.)
- Unconsolidated Shore - Tidal flats, shoals, and intertidal areas
- Bare Land - Bare exposed rock, sand, and soil
- Palustrine Aquatic Bed - Floating vegetation and algal communities
- Estuarine Aquatic Bed - Marine algal communities
- Tundra - Permafrost and pariglacial conditions and communities
- Snow/Ice - Perennial snow and ice

For more information see [http://www.csc.noaa.gov/crs/lca/faq\\_data.htm](http://www.csc.noaa.gov/crs/lca/faq_data.htm).



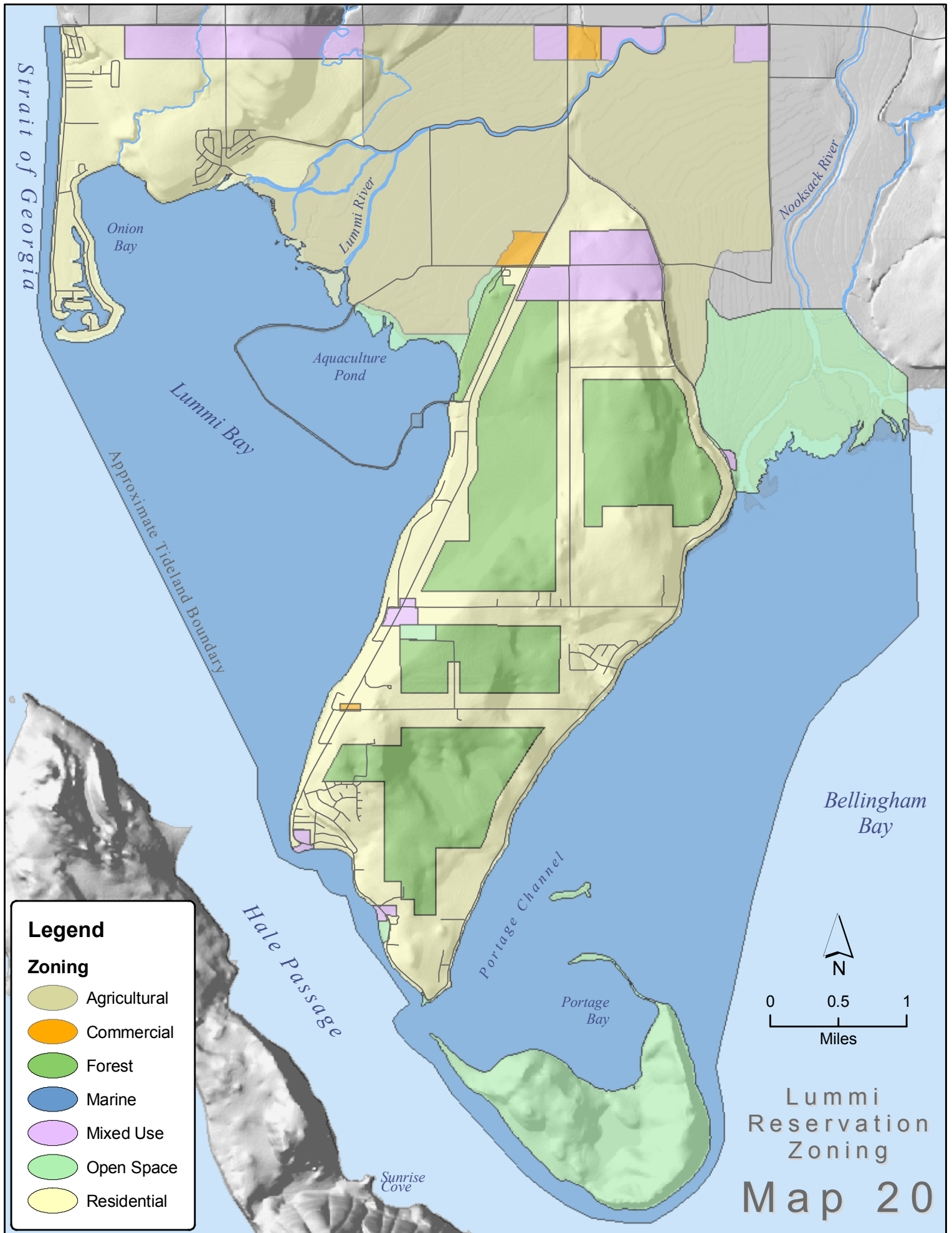
## **Zoning**

The Lummi Indian Business Council (LIBC) recognizes the need for implementation of a comprehensive zoning and development code to ensure orderly growth and protection of the political, economic, social, cultural, and physical integrity of the Tribe. In order to promote the health, safety, and general well being of all residence, and to promote harmony between the many interests on the Reservation, the Lummi Nation Land Use, Zoning, and Development Code (Title 15), and the Lummi Nation Flood Damage Reduction Ordinance (Title 15A) provide clear development standards for current and future use.

The Lummi Planning Commission and the LIBC have classified and divided the Reservation into zone districts shown on Map 20 (LIBC Resolution 2004-115 and updated on August 24, 2004).

- Residential: The residential zone district provides land for tracts of detached single-family homes with a density range comparable to both suburban and rural residential zones, depending on the type and level of services available and neighboring development.
  - Rural Residential: 1-3 dwellings per acre (DW/ac)
  - Suburban Residential: 5-7 (DW/ac).
- Commercial: The commercial zone district comprises land suitable for commercial and business uses to meet objectives in economic development and provide employment opportunities to improve the economic conditions of Tribal members.
- Light Industrial: The light industrial zone district provides land suitable for low impact industrial uses to meet objectives in economic development and provide employment opportunities to improve the economic conditions of the Tribe and its members.
- Forestry: The forestry zone district allocates land suitable for the sustained cultivation and production of forest products and provides land for low-density rural residential development, where such mixed uses are consistent with the Comprehensive plan and Forest management plan.
- Agriculture: The agriculture zone district recognizes the importance of agriculture and allows the continuation of farming activities by allocating land for them. It also allocates land for accessory and supporting uses to farming, including residential and resource conservation. Uses like restoration and protection of natural resources and residential development are allowed in addition to farming
- Open Space: The open space zone district provides land for preservation, conservation and restoration of environmentally and culturally sensitive areas and for low-impact, outdoor recreational uses.
- Marine: The marine zone district comprises an area for treaty-reserved and tribally controlled fishing activities, seafood production, and harvest for the benefit of tribal members.
- Mixed Use: The mixed-use zone district is intended for important community centers where planned multiple uses are allowed and desirable. Any proposed use allowed in the immediately adjacent zone districts is allowed in the Mixed Use zone district with a conditional use permit.

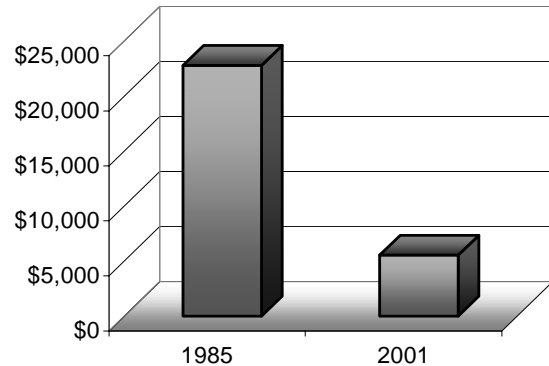
These zone descriptions do not describe the specific legal and technical details pertaining to the conditions for land use. For more information on land use and zoning, refer to Title 15, Lummi Nation Code of Laws, Land Use, Zoning, and Development Code.



## Lummi Reservation Community Facilities

The Lummi Nation is currently the largest fishing tribe in Puget Sound. However, the recent declines in salmon stocks have dramatically altered the tribal dependence on salmon fishing as an economic mainstay. In 1985, the average Lummi fisherman made \$22,796. In 1993, the average income from fishing was only \$5,555. During this period, about 30 percent of the tribal work force relied on fishing for their sole source of income. Since 1993, further reductions in salmon stocks have resulted in closure of some fisheries and a further reduction in tribal fishery incomes (LIBC 1996). In recent years, the annual value of the Lummi Nation fishery has declined from a high of over \$11 million in 1985 to approximately \$5 million in 2001.

**Average Annual Income  
of a Lummi Fisherman**



The Lummi government (the Lummi Indian Business Council [LIBC]) is the 13th largest employer in the Whatcom County area and a major employer on the Reservation today. Most of the LIBC employees are tribal members. The LIBC provides community, administrative, education, material resources management, and health services to the tribal population in order to help achieve the tribal economic and social development goals. These goals include protection and enhancement of cultural resources, job creation for tribal members, income generation to fund community development programs, and diversification and stabilization of the local economy by creating alternatives to fishing. Revenue generation is needed in order for the Lummi Nation to develop economic self-sufficiency. In 1993, 56 percent of the 2,500 working-age Lummi tribal members were unemployed, under-employed, full-time students, or no longer seeking work (LIBC 1996). Since 1993, the combined effect of the decline in the fishery and the closure of the original casino had a substantial negative impact on the Lummi economy. The results of a survey of 2,054, over-18, enrolled tribal members conducted by the LIBC in 2003 (LIBC 2003) indicate that 28 percent of adult tribal members are unemployed and up to 14 percent may be underemployed (part-time plus seasonally employed).

The Lummi Casino project began in 1983 in an effort to diversify the Reservation economy. The





**Lummi Mini-mart**

casino operation was upgraded significantly in 1994 with the opening of the Lummi Casino at Fisherman's Cove. The casino flourished initially, employing approximately 400 people, 65 percent of whom were Native American (LIBC 1996).

However, competition and changing economic conditions resulted in the closure of the casino on August 26, 1997. With 238 workers losing their jobs, the Lummi unemployment rate grew

to approximately 50 percent. A new casino opened in April 2002 at a new location (the corner of Haxton Way and Slater Road) that is closer to the Interstate 5 highway. The new casino (Silver Reef Casino) employs approximately 200 people in a range of positions paying from \$16,000 to \$60,000 per year. A casino expansion project became operational in April 2004, and work is currently underway to build a hotel addition to the Silver Reef Casino (scheduled to open in June 2006). Adjacent to the Silver Reef Casino, the LIBC operates a gas station and mini-mart. Other employment opportunities exist at the two oil refineries and the aluminum smelter (though it is threatened with closure because of increased electricity costs) just north of the Reservation and nearby in the communities of Ferndale and Bellingham. In addition, 15 to 20 small businesses are located on the Reservation.



**Lummi K-12 School**

The Lummi Nation was one of the first Indian tribes to participate in the federal government Self-Governance project. This project, which began with the “Indian Self Determination and Education

Assistance Act of 1975,” allowed Indian tribes to take over the administration of programs formerly controlled by the federal government, such as education, medical services, construction, and law enforcement. Under the Self-Governance program, the Lummi Nation has established a tribal business assistance center, a cultural department, and a youth program and has funded a volunteer fire department, scholarships, a tribal court, and other tribal programs related to natural resources, forestry, seniors, and veterans. (LIBC 2003) A new \$24 million K-12 school was completed in 2004.



**Lummi Tribal Court**

Lummi Indian Business Council (LIBC). 1996. Lummi Nation comprehensive environmental land use plan: background document. LIBC, Lummi Reservation.

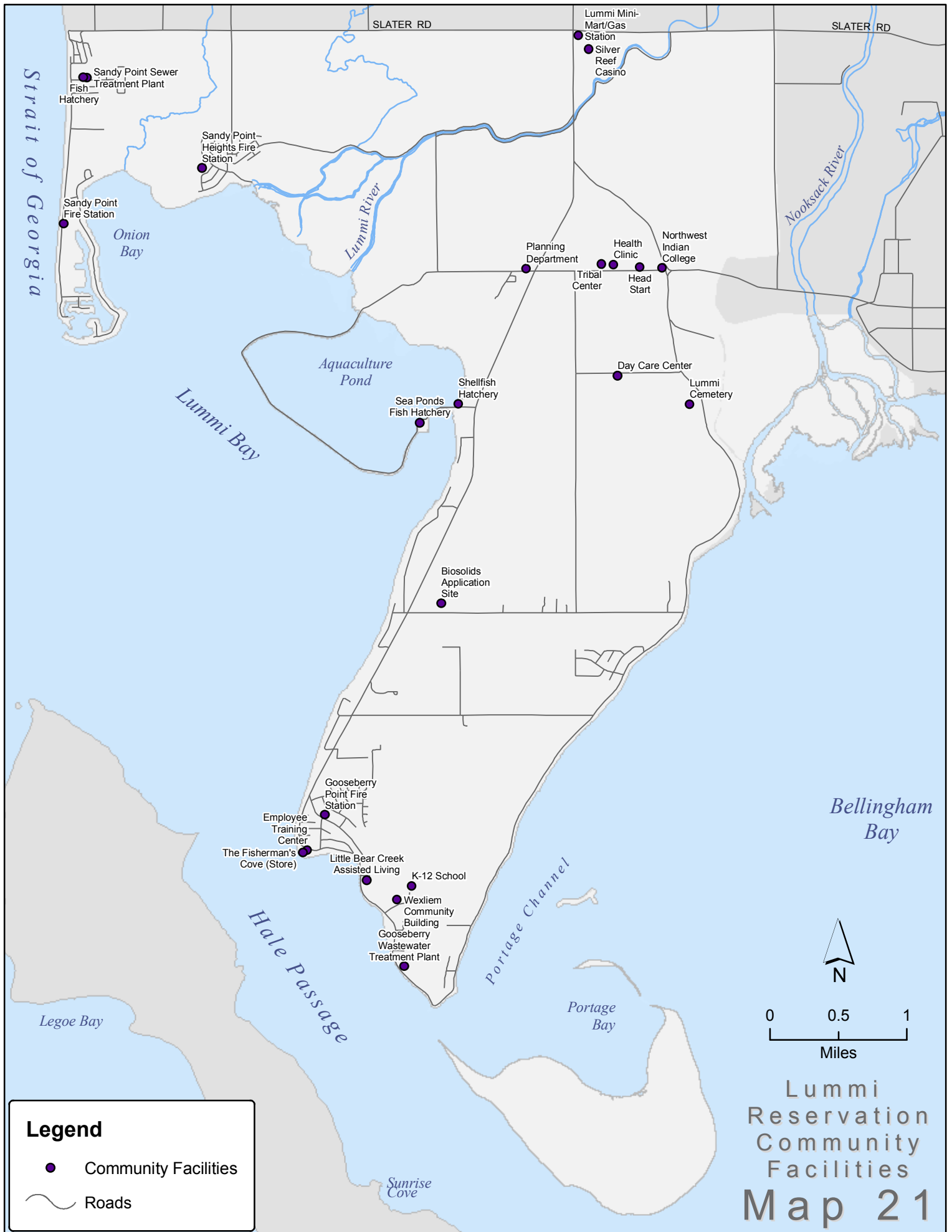
Lummi Indian Business Council (LIBC). 2003. 2003 Lummi Tribal Survey. LIBC, Lummi Reservation.

Lummi Indian Business Council (LIBC). 2003. Present and Future Comprehensive Ground Water Need for the Lummi Peninsula on the Lummi Indian Reservation Homeland. Northwest Economic Associates, Vancouver, WA.

Lummi Indian Business Council (LIBC). 2004. Lummi Nation Multi-Hazard Mitigation Plan. LIBC, Lummi Reservation.

U.S. Bureau of Indian Affairs (BIA). 1999. Indian Service Population and Labor Force Estimates. U.S. Department of the Interior, Bureau of Indian Affairs.





## **Lummi Ownership**

Land ownership on the reservation is divided into five categories: Individual Native Trust, Individual Native Fee, Tribal Fee, Tribal Trust, and Fee. The following table summarizes the area of uplands in each of these categories. All of the approximately 7,000 acres of tidelands on the Reservation are in Tribal Trust status.

<b>Category</b>	<b>Acres</b>	<b>Percentage</b>
Individual Native Trust	6,800	53%
Non-Tribal Fee	3,000	23%
Tribal Trust	1,575	12%
In Process (of becoming Trust land	990	8%
Tribal Fee	289	2%
Individual Native Fee	194	2%

Ownership of a parcel determines the property tax (if any) applicable to the property, what types of land use can occur on the parcel, and jurisdiction. The Lummi Nation claims jurisdiction over all lands on the Reservation.

### **Trust**

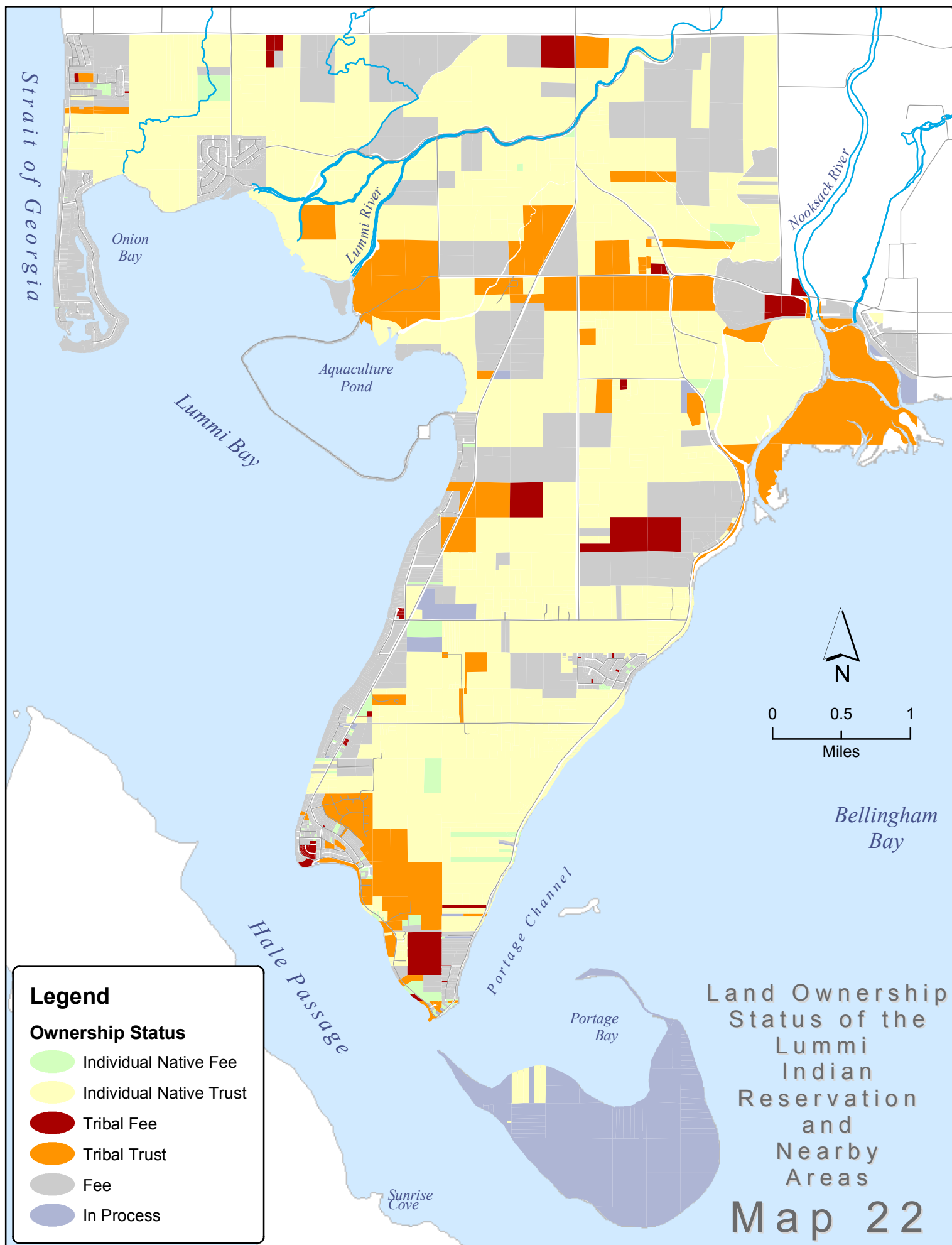
Trust status refers to Indian-owned land, the title to which is held in trust and protected by the federal government. Indian people and tribes have use of the land, but ultimate control of the land remains with the federal government. Because of the extension of treaties, all land within the defined boundaries of Indian reservations and some of those owned by tribes or individuals off the reservation are held in "trust status." This means that the administration and disposition of an individual or tribe's land base is supervised by the Bureau of Indian Affairs through federal law. Thus, even though an individual Indian may own a parcel of land he/she cannot lease, sell, or mortgage his/her land without Bureau of Indian Affairs acknowledgment and permission.

### **Individual Land Ownership**

Under the Treaty of Point Elliot the federal government had the authority to assign specific parcels of land to the heads of tribal families for use by that family and their descendents subject to restrictions on sale imposed by the federal government. Much of the land on the Reservation is now held in multiple ownership by descendents of the original assignees, subject to those restrictions. This land has the same status as "trust land" under the law. These lands are shown on the mapping as Individual Native Trust lands.

### **Fee Simple**

This is the most basic form of ownership. The owner holds title and control of the property. The owner may make decisions about the most common land use or sale without government oversight. In Indian country, however, whether the owner of fee simple land is Indian or non-Indian is a factor in deciding who has jurisdiction over the land. Due to the checker boarding of Indian reservations, different governing authorities - such as county, state, federal, and tribal governments – may claim the authority to regulate, tax, or perform various activities within reservation borders based on whether a piece of land is Indian or non-Indian owned. These different claims to jurisdictional authority often conflict. The case law relevant to jurisdiction on these lands is complex and on some points inconsistent and unsettled.



## **Households**

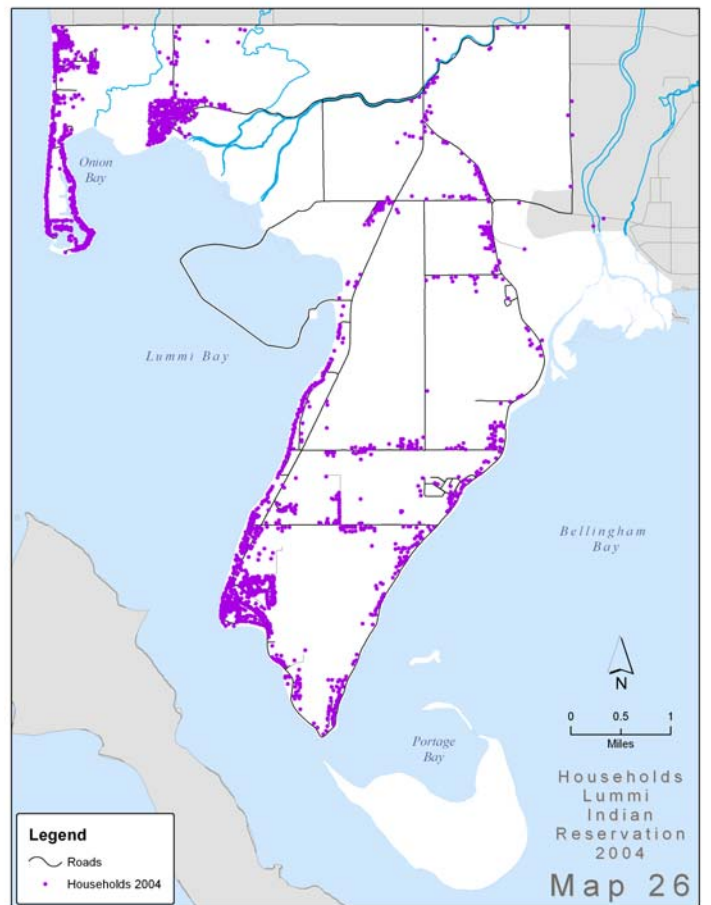
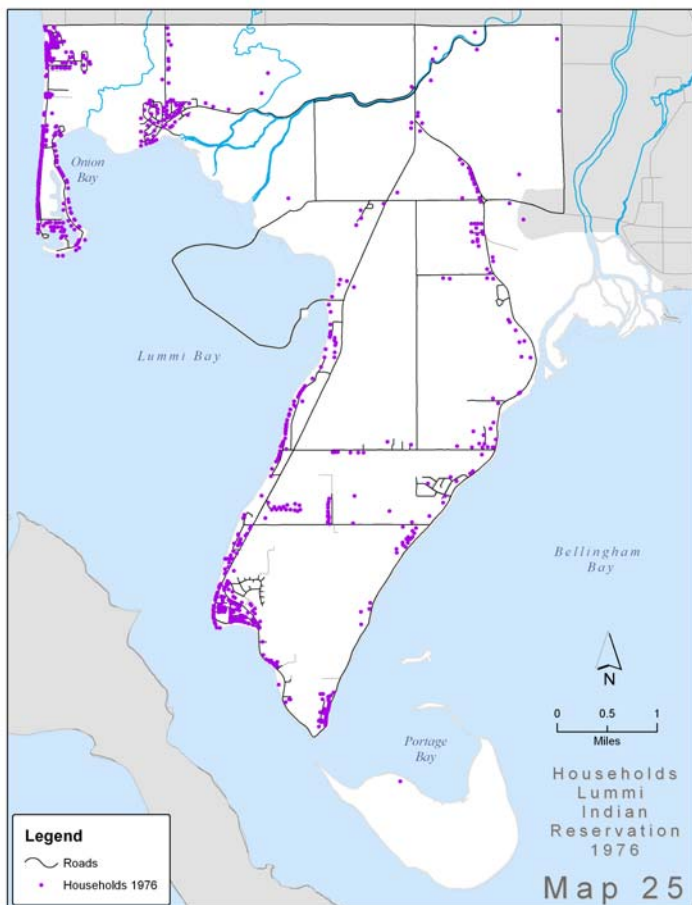
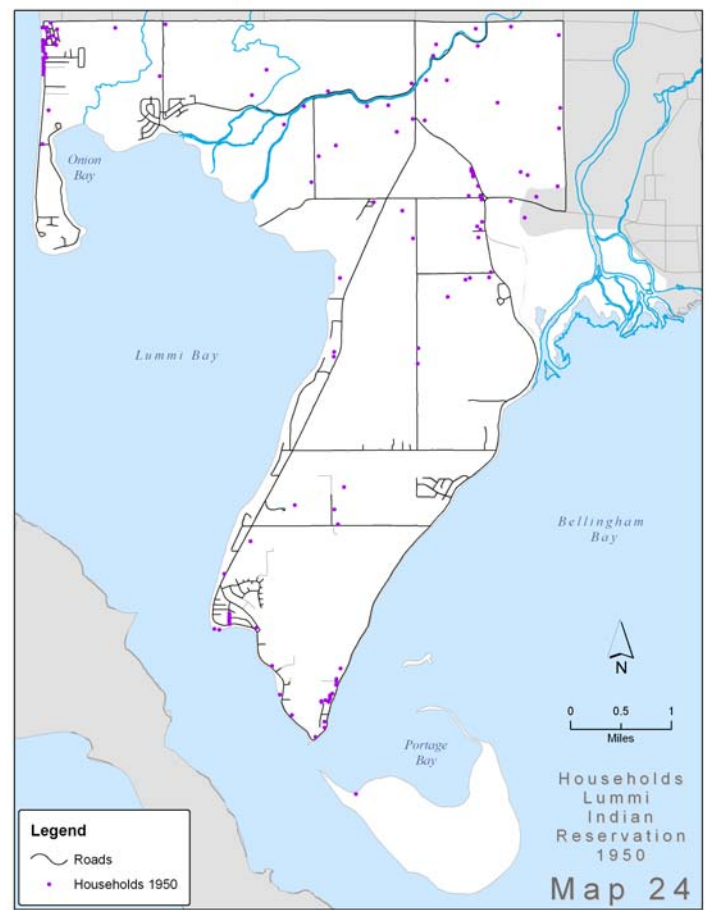
The households map series (Maps 23 through Map 26) shows building trends over time for the Lummi Indian Reservation. Over the last century, the construction of extensive road networks, the Sandy Point Marina, and several Tribal housing projects have fostered the trend towards higher density neighborhoods throughout the Reservation.

The 2000 Census found 1,749 housing units on the Reservation, of which 1,455 (83.2%) were occupied year-round and 221 (12.6%) were for seasonal or occasional use. The remaining 73 (4.2%) housing units were vacant.

Several distinct residential neighborhoods now exist, mainly along the west shores of the Reservation including Sandy Point, Sandy Point North, Sandy Point Heights, and Gooseberry Point. Higher density residential neighborhoods can also be accessed from the numerous spur roads along Haxton Way and Lummi Shore Road running the length of the Lummi Peninsula. The Sandy Point neighborhoods, as well as the numerous waterfront parcels along the west shore of the Lummi Peninsula, consist of a combination of tribal and fee lands. The east shore of the Lummi Peninsula, and the numerous scattered subdivisions in the interior of the Reservation, are almost exclusively tribal-member-owned properties.

Many of the more expensive homes on the Reservation are located in the coastal flood zones along the Sandy Point Peninsula, Neptune Beach, Gooseberry Point, and Hermosa Beach shorelines. Most of these houses were constructed since 1960, including significant new construction and additions in the past two decades. Relatively few homes are located in the Nooksack River floodplain; many of these are on agricultural properties and were constructed before 1950.

During the summer of 2004, over eighteen hundred GPS waypoints were manually collected to represent the physical location, address, and street name of each structure on the Reservation. 1,826 private residences, 9 businesses, and 26 community buildings, including churches, schools, police stations, and fire stations were accurately recorded. The data collected in 2004 was compiled into a detailed address and road atlas, and is available electronically by contacting the Lummi Natural Resources Department.



## **Public Water System on the Reservation**

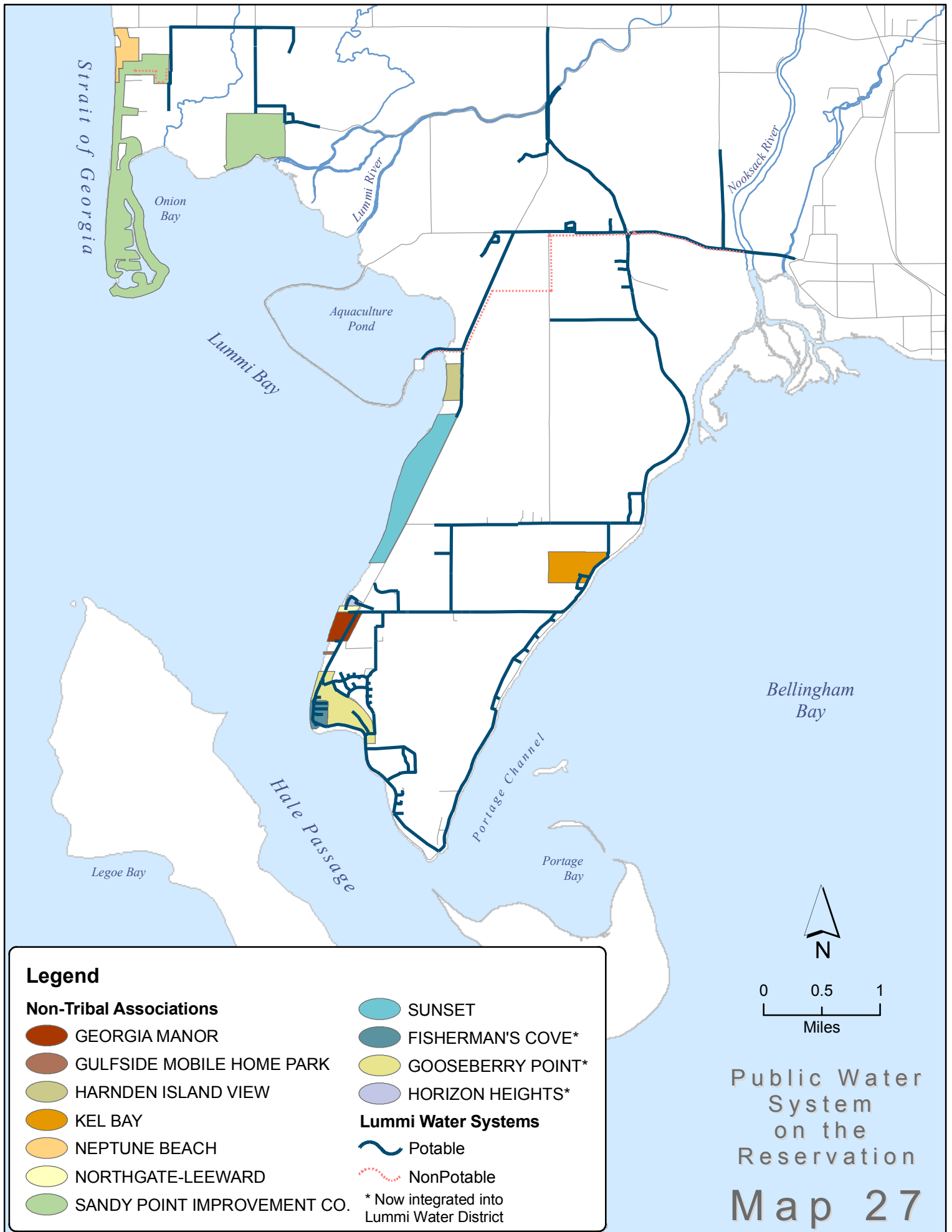
Currently, there are four categories of water purveyors on the Reservation. The first category is the Lummi Water District, which operates and maintains the largest water system on the Reservation. The Lummi Water District operates a network of seven production wells and has the capability to obtain supplemental water from the City of Bellingham pursuant to a contractual relationship. Non-tribal water associations represent the second category of water purveyor on the Reservation. There are currently eight non-tribal water associations (Neptune Beach, Sandy Point Improvement Company, Sunset, Georgia Manor, Harnden Island View, Leeward-Northgate, Gulfside Mobile Home Park, and Bel Bay), which serve predominately non-tribal members in residential areas along the Reservation shorelines. Three former non-tribal water associations (Horizon Heights, Fisherman's Cove, Gooseberry Point) have been integrated with the Lummi water system and are now provided water by the Lummi Water District. The third category of water purveyors is represented by the approximately 115 individual or small group domestic water supply wells. The fourth category is the Lummi Natural Resources Department operated systems that supply untreated surface and ground water for the Lummi Nation salmon propagation program.

Prior to the 1960s, Reservation residents generally obtained water from the Nooksack River, springs, hand dug wells, or relied on water hauled from community wells. The water distribution system that was to become the Lummi Water District System was constructed beginning in 1964 with funding provided by the Indian Health Service (IHS) under P.L. 86-121 (Projects PO-63-832 and PO-63-839). In the first projects, 8 small low-pressure community systems relying on 22 individual wells were developed to serve 86 families. The Lummi Water District system expanded from that point forward and is continuing to expand to meet the needs of the growing community.

The Lummi Water District serves the Reservation in two separate subsystems: the Lummi Peninsula water system and the Lake Terrell/North Red River Road water system. The Lummi Peninsula system currently serves most of the tribal members on the Reservation and approximately 200 non-tribal residences. The total customer base on the Lummi Peninsula system is approximately 815 residential connections and 60 commercial/municipal connections.

The LWD system has four water storage tanks with a combined capacity of 625,000 gallons. The distribution system consists mainly of 10-inch ductile iron (DI), 6- and 8-inch polyvinyl chloride (PVC), and 4- and 6-inch asbestos cement (AC) pipe, but also has various sections of pipe that vary from 10 inch high-density polyethylene (HDPE) to 3 inch AC and 2 ½ inch polyethylene (PE).

Local ground water is currently the only water source available to Reservation residents who are not supplied by the Lummi Water District. Although the Lummi Water District has access to City of Bellingham water, its high cost and concerns about the impact of diversion from the Nooksack River fisheries resources limit the utilization of the Bellingham supply source for the water district. Currently the Bellingham supply is viewed only as a stand-by source for the water district. The current design capacity and contractual limits of this water line is approximately 1,000 gallons per minute or about 1.4 million gallons per day (1,613 acre-feet per year). Although only about 5 percent of the water supplied by the district came from the Bellingham source during 2001 and 2002, the percentage increased to approximately 9 percent during 2003 was largely due to ground water pumping capacity issues. To address these capacity issues, existing test wells are being converted to production wells to supply tribal housing projects. There is currently no interconnection between the Lummi Water District subsystems on the Lummi Peninsula and the Lake Terrell/North Red River Road area and only the Lummi Peninsula subsystem can currently access the supplemental Bellingham water supply.



Treaty between the United States and the Dwamish, Suquamish, and other allied  
and subordinate Tribes of Indians in Washington Territory.

**JAMES BUCHANAN,  
PRESIDENT OF THE UNITED STATES OF AMERICA**

TO ALL AND SINGULAR TO WHOM THESE PRESENTS SHALL COME, GREETING:

WHEREAS a treaty was made and concluded at Muckl-te-oh, or Point Elliott, in the territory of Washington, this twenty-second day of January, eighteen hundred and fifty-five, by Isaac I. Stevens, governor and superintendent of Indian affairs for the said Territory, on the part of the United States, and the undersigned chiefs, head-men and delegates of the Dwamish, Suquamish, Sk-kahl-mish, Sam-ahmish, Smalh-kamish, Skope-ahmish, St-kah-mish, Snoqualmoo, Skai-wha-mish, N'Quentl-ma-mish, Sk-tah-le-jum, Stoluck-wha-mish, Sno-ho-mish, Skagit, Kik-i-allus, Swin-a-mish, Squin-ah-mish, Sah-ku-mehu, Noo-wha-ha, Nook-wa-chah-mish, Mee-see-qua-guilch, Cho-bah-ah-bish, and othe allied and subordinate tribes and bands of Indians occupying certain lands situated in said Territory of Washington, on behalf of said tribes, and duly authorized by them.

**ARTICLE 1.** The said tribes and bands of Indians hereby cede, relinquish, and convey to the United States all their right, title, and interest in and to the lands and country occupied by them, bounded and described as follows: Commencing at a point on the eastern side of Admiralty Inlet, known as Point Pully, about midway between Commencement and Elliott Bays; thence eastwardly, running along the north line of lands heretofore ceded to the United States by the Nisqually, Puyallup, and other Indians, to the summit of the Cascade range of mountains; thence northwardly, following the summit of said range to the 49th parallel of north latitude; thence west, along said parallel to the middle of the Gulf of Georgia; thence through the middle of said gulf and the main channel through the Canal de Arro to the Straits of Fuca, and crossing the same through the middle of Admiralty Inlet to Suquamish Head; thence southwesterly, through the peninsula, and following the divide between Hood's Canal and Admiralty Inlet to the portage known as Wilkes' Portage; thence northeastwardly, and following the line of lands heretofore ceded as aforesaid to Point Southworth, on the western side of Admiralty Inlet, and thence around the foot of Vashon's Island eastwardly and southeastwardly to the place of beginning, including all the islands comprised within said boundaries, and all the right, title, and interest of the said tribes and bands to any lands within the territory of the United States.

**ARTICLE 2.** There is, however, reserved for the present use and occupation of the said tribes and bands the following tracts of land, viz: the amount of two sections, or twelve hundred and eighty acres, surrounding the small bight at the head of Port Madison, called by the Indians Noo-sohk-um; the amount of two sections, or twelve hundred and eighty acres, on the north side Hwhomish Bay and the creek emptying into the same called Kwilt-seh-da, the peninsula at the southeastern end of Perry's Island, called Shais-quihl, and the island called Chah-choo-sen, situated in the Lummi River at the point of separation of the mouths emptying respectively into Bellingham Bay and the Gulf of Georgia; all which tracts shall be set apart, and so far as necessary surveyed and marked out for their exclusive use; nor shall any white man be permitted to reside upon the same without permission of the said tribes or bands, and of the superintendent or agent, but, if necessary for the public convenience, roads may be run through the said reserves, the Indians being compensated for any damage thereby done them.

**ARTICLE 3.** There is also reserved from out the lands hereby ceded the amount of thirty-six sections, or one township of land, on the northeastern shore of Port Gardner, and north of the mouth of Snohomish River, including Tulalip Bay and the before-mentioned Kwilt-seh-da Creek, for the purpose of establishing thereon an agricultural and industrial school, as hereinafter

mentioned and agreed, and with a view of ultimately drawing thereto and settling thereon all the Indians living west of the Cascade Mountains in said Territory. Provided, however, That the President may establish the central agency and general reservation at such other point as he may deem for the benefit of the Indians.

**ARTICLE 4.** The said tribes and bands agree to remove to and settle upon the said first above-mentioned reservations within one year after the ratification of this treaty, or sooner, if the means are furnished them. In the mean time it shall be lawful for them to reside upon any land not in the actual claim and occupation of citizens of the United States, and upon any land claimed or occupied, if with the permission of the owner.

**ARTICLE 5.** The right of taking fish at usual and accustomed grounds and stations is further secured to said Indians in common with all citizens of the Territory, and of erecting temporary houses for the purpose of curing, together with the privilege of hunting and gathering roots and berries on open and unclaimed lands. Provided, however, that they shall not take shell-fish from any beds staked or cultivated by citizens.

**ARTICLE 6.** In consideration of the above cession, the United States agree to pay to the said tribes and bands the sum of one hundred and fifty thousand dollars, in the following manner - - that is to say: For the first year after the ratification hereof, fifteen thousand dollars; for the next two year, twelve thousand dollars each year; for the next three years, ten thousand dollars each year; for the next four years, seven thousand five hundred dollars each years; for the next five years, six thousand dollars each year; and for the last five years, four thousand two hundred and fifty dollars each year. All which said sums of money shall be applied to the use and benefit of the said Indians, under the direction of the President of the United States, who may, from time to time, determine at his discretion upon what beneficial objects to expend the same; and the superintendent of Indian affairs, or other proper officer, shall each year inform the President of the wishes of said Indians in respect thereto.

**ARTICLE 7.** The President may hereafter, when in his opinion the interests of the Territory shall require and the welfare of the said Indians be promoted, remove them from either or all of the special reservations hereinbefore make to the said general reservation, or such other suitable place within said Territory as he may deem fit, on remunerating them for their improvements and the expenses of such removal, or may consolidate them with other friendly tribes or bands; and he may further at his discretion cause the whole or any portion of the lands hereby reserved, or of such other land as may be selected in lieu thereof, to be surveyed into lots, and assign the same to suc individuals or families as are willing to avail themselves of the privilege, and will locate on the same as a permanent home on the same terms and subject to the same regulations as are provided in the sixth article of the treaty with the Omahas, so far as the same may be applicable. Any substantial improvements heretofore made by any Indian, and which he shall be compelled to abandon in consequence of this treaty, shall be valued under the direction of the President and payment made accordingly therefor.

**ARTICLE 8.** The annuities of the aforesaid tribes and bands shall not be taken to pay the debts of individuals.

**ARTICLE 9.** The said tribes and bands acknowledge their dependence on the Government of the United States, and promise to be friendly with all citizens thereof, and they pledge themselves to commit no depredations on the property of such citizens. Should any one or more of them violate this pledge, and the fact be satisfactorily proven before the agent, the property taken shall be returned, or in default thereof, of if injured or destroyed, compensation may be made by the Government out of their annuities. Nor will they make war on any other tribe except in selfdefence, but will submit all matters of difference between them and the other Indians to the Government of the United States or its agent for decision, and abide thereby. And if any of the said Indians commit depredations on other Indians within the Territory the same rule shall prevail as that prescribed in this article in cases of depredations against citizens. And the said tribes

agree not to shelter or conceal offenders against the laws of the United States, but to deliver them up to the authorities for trial.

**ARTICLE 11.** The said tribes and bands agree to free all slaves now held by them and not to purchase or acquire others hereafter.

**ARTICLE 12.** The said tribes and bands further agree not to trade at Vancouver's Island or elsewhere out of the dominions of the United States, nor shall foreign Indians be permitted to reside in their reservations without consent of the superintendent or agent.

**ARTICLE 13.** To enable the said Indians to remove to and settle upon their aforesaid reservations, and to clear, fence, and break up a sufficient quantity of land for cultivation, the United States further agree to pay the sum of fifteen thousand dollars to be laid out and expended under the direction of the President and in such manner as he shall approve.

**ARTICLE 14.** The United States further agree to establish at the general agency for the district of Puget's Sound, within one year from the ratification hereof, and to support for a period of twenty years, an agricultural and industrial school, to be free to children of the said tribes and bands in common with those of the other tribes of said district, and to provide the said school with a suitable instructor or instructors, and also to provide a smithy and carpenter's shop, and furnish them with the necessary tools, and employ a blacksmith, carpenter, and farmer for the like term of twenty years to instruct the Indians in their respective occupations. And the United States finally agree to employ a physician to reside at the said central agency, who shall furnish medicine and advice to their sick, and shall vaccinate them; the expenses of said school, shops, persons employed, and medical attendance to be defrayed by the United States, and not deducted from the annuities.

**ARTICLE 15.** This treaty shall be obligatory on the contracting parties as soon as the same shall be ratified by the President and Senate of the United States.

*In testimony whereof, the said Isaac I. Stevens, governor and superintendent of Indian affairs, and the undersigned chiefs, headmen, and delegates of the aforesaid tribes and bands of Indians, have hereunto set their hands and seals, at the place and on the day and year hereinbefore written.*

Issac I. Stevens,  
Governor and Superintendent. (L.S.)

<b>Seattle</b>	his x mark	Chief of the Dwamish and Suquamish tribes
Pat-ka-nam	his x mark	Chief of the Snoqualmoo, Snohomish and other tribes
Chow-its-hoot	his x mark	Chief of the Lummi and other tribes
Gonah	his x mark	Chief of the Skagits and other allied tribes
Kwallattum	his x mark	Sub-chief of the Skagit tribe
S'hootst-hoot	his x mark	Sub-chief of Snohomish
Snah-tale	his x mark	Sub-chief of Snohomish
Squush-um	his x mark	Sub-chief of the Snoqualmoo
See-alla-pa-han	his x mark	Sub-chief of Sk-tah-le-jum
He-uch-ka-nam	his x mark	Sub-chief of Snohomish
Tse-nah-talc	his x mark	Sub-chief of Snohomish
Ns'ski-oos	his x mark	Sub-chief of Snohomish
Wats-ka-lah-tchie	his x mark	Sub-chief of Snohomish
Smeh-mai-hu	his x mark	Sub-chief of Skai-wha-mish
St'hau-ai	his x mark	Sub-chief of Snoqualmoo
Lugs-ken,	his x mark	Sub-chief of Skai-wha-mish
S'heht-soolt	his x mark	Sub-chief of Snohomish

Do-queh-oo-satl	his x mark	Snoqualmoo tribe
John Kanam	his x mark	Snoqualmoo sub-chie
Klemsh-ka-nam	his x mark	Snoqualmoo
Ts'huahntl	his x mark	Dwa-mish sub-chief
Kwuss-ka-nam	his x mark	Sen., Skagit tribe
Hel-mits	his x mark	Skagit sub-chief
S'kwai-kwi	his x mark	Skagit tribe, sub-chief
Seh-lek-qu	his x mark	Sub-chief Lummi tribe
S'h'-cheh-oos	his x mark	Sub-chief of Lummi tribe
Whai-lan-hu	his x mark	Sub-chief of Lummi tribe
She-ah-delt-hu	his x mark	Sub-chief of Lummi tribe
Kwult-seh	his x mark	Sub-chief of Lummi tribe
Kwull-et-hu	his x mark	Lummi tribe
Kleh-kent-soot	his x mark	Skagit tribe
Sohn-heh-ovs	his x mark	Skagit tribe
S'deh-ap-kan	his x mark	Skagit tribe
Chul-whil-tan	his x mark	Sub-chief of Suquamish tribe
Ske-eh-tum	his x mark	Skagit tribe
Patchkanam	his x mark	Skagit tribe
Sats-Kanam	his x mark	Squin-ah-nush tribe
Sd-zo-mahtl	his x mark	Kik-ial-lus band
Dahtl-de-min	his x mark	Sub-chief of Sah-ku-meh-hu
Sd'zek-du-num	his x mark	Me-sek-wi-guilse sub-chief
Now-a-chais	his x mark	Sub-chief of Dwamish
Mis-lo-tche	his x mark	Sub-chief of Suquamish
Sloo-noksh-tan	his x mark	Suquamish tribe
Moo-whah-lad-hu	his x mark	Suquamish tribe
Too-leh-plan	his x mark	Suquamish tribe
Ha-seh-doo-an	his x mark	Dwamish tribe
Hoovilt-meh-tum	his x mark	Sub-chief of Suquamish
We-ai-pah	his x mark	Skaiwhamish tribe
S'ah-an-hu	his x mark	Snohomish tribe
She-hope	his x mark	Skagit tribe
Hwn-lah-lakq	his x mark	Lummi tribe
Cht-simpt	his x mark	Lummi tribe
Tse-sum-ten	his x mark	Lummi tribe
Klt-hahl-ten	his x mark	Lummi tribe
Kut-ta-kanam	his x mark	Lummi tribe
Ch-lah-ben	his x mark	Noo-qua-cha-mish band
Noo-heh-oos	his x mark	Snoqualmoo tribe
Hweh-uk	his x mark	Snoqualmoo tribe
Peh-nus	his x mark	Skai-whamish tribe
Yim-ka-dam	his x mark	Snoqualmoo tribe
Twooi-as-kut	his x mark	Skaiwhamish tribe
Luch-al-kanam	his x mark	Snoqualmoo tribe
S'hoot-kanam	his x mark	Snoqualmoo tribe
Sme-a-kanam	his x mark	Snoqualmoo tribe
Sad-zis-keh	his x mark	Snoqualmoo
Heh-mahl	his x mark	Skaiwhamish band
Charley	his x mark	Skagit tribe
Sampson	his x mark	Skagit tribe
John Taylor	his x mark	Snohomish tribe
Hatch-kwentum	his x mark	Skagit tribe
Yo-i-kum	his x mark	Skagit tribe
T'kwa-ma-han	his x mark	Skagit tribe
Sto-dum-kan	his x mark	Swinamish band

Be-lole	his x mark	Swinamish band
D'zo-lole-gwam-hu	his x mark	Skagit tribe
Steh-shail	his x mark	Skaiwhamish band
Kel-kahl-tsoot	his x mark	Swinamish tribe
Pat-sen	his x mark	Skagit tribe
Pat-teh-us	his x mark	Noo-wha-ah sub-chief
S'hoolk-ka-nam	his x mark	Lummi sub-chief
Ch-lok-suts	his x mark	

**Executed in the presence of us - -**

M. T. Simmons, Indian agent.	S. S. Ford, Jr.
C. H. Mason, Secretary of Washington Territory.	Orrington Cushman.
Benj. F. Shaw, Interpreter.	Ellis Barnes.
Chas. M. Hitchcock.	R. S. Bailey.
H. a. Goldsborough.	S. M. Collins.
George Gibbs.	Lafayette Balch.
John H. Scranton.	E. S. Fowler.
Henry D. Cock.	J. H. Hall.
	Rob't Davis.

**And whereas**, the said treaty having been submitted to the Senate of the United State for its constitutional action thereon, the Senate did, on the eighth day of March, one thousand eight hundred and fifty-nine, advise and consent to the ratification of its articles by a resolution in the words and figures following, to wit:

**"In Executive Session,**

" Senate of the United States, march, 8, 1859.

" **Resolved**, (two-thirds of the senators present concurring.) That the Senate advise and consent to the ratification of treaty between the United States and the chiefs, headmen and delegates of the Dwamish, Suquamish, and other allied and subordinate tribes of Indians occupying certain lands situated in Washington territory, signed the 22<sup>nd</sup> day of January, 1855.

" Attest

" Asbury Dickins, Secretary."

**Now, therefore**, be it know that I, James Buchanan, President of the United States of America, do, in pursuance of the advice and consent of the Senate, as expressed in their resolution of the eighth of March, one thousand eight hundred and fifty-nine, accept, ratify, and confirm the said treaty.

In testimony whereof, I have caused the seal of the United States to the Herto affixed, and have signed the same with my hand.

Done at the city of Washington, this eleventh day of April, in the year of our lord one thousand eight hundred and fifty-nine, and of the independence of the United States the eighty-third.

**James Buchanan**



# **CONSTITUTION AND BYLAWS OF THE LUMMI TRIBE OF THE LUMMI RESERVATION, WASHINGTON AS AMENDED**

## **PREAMBLE**

We, the members of the Lummi Tribe of Indians of the Lummi Reservation in the State of Washington, in order to make the tribal government, established by the constitution and bylaws approved April 10, 1970, more responsive to the tribe, to develop our community resources, administer justice, protect our tribal interests, and promote the economic and social welfare of ourselves and our descendants, and to preserve our land base, culture, and identity, do hereby establish this constitution and bylaws, which shall revoke and replace said constitution and bylaws approved April 2, 1948, and shall henceforth constitute the governing document of the Lummi Tribe.

[Amended: Resolution #98-23, March 6, 1998.]

## **ARTICLE I - TERRITORY AND JURISDICTION**

The jurisdiction of the Lummi Nation shall extend to: (a) all lands, waters and other resources within the territorial boundaries of the Lummi Reservation as established by the Treaty of January 22, 1855 and added to the Lummi Reservation by the Executive Order of November 11, 1873; (b) all lands, waters and other resources as may be hereafter added to the Lummi Reservation; (c) all lands, waters and other resources owned by the Lummi Nation or held in trust for the Nation or its members; (d) persons and activities within or affecting the lands, waters, and other resources subject to the Nation's jurisdiction; (e) the exercise of treaty reserved rights, including but not limited to, fishing, hunting and gathering; (f) all cultural property resources and activities of the Lummi People; (g) all members or individuals eligible for membership in the Lummi Nation and their descendents.

[Amended: Resolution #2006-019, February 7, 2006]

## **ARTICLE II - MEMBERSHIP**

Section 1. The membership of the Lummi Tribe shall consist of the following:

- (a) All persons of Indian blood whose names appear on the Official Census Roll of the Tribe as of January 1, 1942, provided that such roll may be corrected by the Lummi Business Council with the approval of the Commissioner of Indian Affairs.
- (b) Any person of Indian blood who were residents of the reservation on January 1, 1947, and whose names would have been placed on a census roll of that date had one been prepared.

- (c) All other persons of Indian blood resident on the reservation at any time between January 1, 1942, and the effective date of this constitution, who were accepted by the general council as members of the Lummi Tribe.
- (d) All children born between January 1, 1942, and the effective date of this constitution, to any member of the tribe who was living on the Lummi Reservation at the time of the birth of said child.
- (e) All children of one-fourth (1/4) degree or more Indian blood born between January 1, 1942, and effective date of this constitution, to any member of the tribe not living on the reservation at the time of the birth of said child.
- (f) All children of one-fourth (1/4) degree or more Indian blood born to any member of the tribe after the effective date of this constitution.

Sec. 2. The Lummi Business Council shall have the power to pass ordinances subject to the approval of the Commissioner of Indian Affairs, governing future membership, abandonment of membership, and the adoption of new members, provided that all adoptions must be approved by the general council.

### **ARTICLE III - GENERAL COUNCIL**

Section 1. The general council shall consist of the entire voting membership of the Lummi Tribe when it is convened officially for official business. The annual general council meeting shall be called during the first week of January, provided that special meetings shall be called by majority vote of the business council or upon the request, in writing, of twenty voting members of the tribe. Public notices of all special general council meetings shall be made at least ten (10) days prior to such meetings. It shall also be the duty of the chairman to make a report at the annual general council meeting of the activities of the business council throughout the past year and to outline proposed plans for future economic and social betterment of the tribe.

Sec. 2. Voter Qualifications. Any member of the Lummi Tribe, eighteen (18) years of age, or over, who has maintained legal residence on the reservation or within the boundaries of Whatcom County, Washington, for at least six (6) months immediately preceding any election, shall be qualified to vote on all matters before the general council meetings.  
[Amended: Resolution #98-23, March 6, 1998.]

Sec. 3. The duties of the general council shall consist of but need not be limited to the following:

- (a) Act on all adoptions recommended by the business council, as provided in Section 2, Article II of this constitution;
- (b) Review the actions of the business council at the annual meeting;
- (c) Recommend actions to be taken by the business council;

- (d) Appoint a committee to certify all elections to the business council;
- (e) Consider the recall of members of the business council, as provided in Section 2, Article V, and consider all referendums, as provided in Article VII of this constitution.

## **ARTICLE IV - GOVERNING BODY**

Section 1.     The governing body of the Lummi Tribe shall be a business council consisting of eleven (11) members duly elected to serve for a three-year term, as provided in Section 4 of this Article, provided that a minimum of seven (7) members must live on the reservation.

Sec. 2.        Qualifications. Any eligible voter shall be qualified to serve as a member of the Lummi Business Council, provided that he has been living within the boundaries of Whatcom County, Washington for at least one (1) year immediately preceding any election, and complies with Section 1 of this Article.

Sec. 3.        Selection of Officers. The business council so organized shall, on a yearly basis, elect from within its own number: (1) a chairman, (2) a vice-chairman, (3) a secretary, and (4) a treasurer, and may appoint or employ such other officers or committees as may be necessary.

Sec. 4.        Election of Business Council Members. After the ratification and approval of this constitution and bylaws, the first business council under this constitution shall be the council existing under the 1948 constitution. Members of that body shall draw lots in order that the terms of office of the present members can be determined for one, two, or three years, and thereafter an election shall be held at the next regular general council meeting for the positions held by the three councilmen who drew the one-year lots with an election of these three positions every three years thereafter. In the other years, four councilmen shall be elected at the regular general council meeting, first for the positions held by the four councilmen who drew the two-year lots and then for the positions held by the four councilmen who drew the three-year lots.

## **ARTICLE V - VACANCIES AND RECALL**

Section 1.     Vacancy. If any member of the business council shall die, resign, or move outside the boundaries of Whatcom County, or shall be found guilty of a felony, or a misdemeanor involving dishonesty in any Indian, State, or Federal court, a vacancy in his office shall automatically be created, and at its next regular or special meeting, the business council shall appoint a person qualified pursuant to Article IV to fill the office until the next annual general council meeting, at which time a successor shall be elected pursuant to Article IV, to fill the office for the balance of the unexpired term, provided that whether vacancies are filled by appointment or election, the number of council members required to live on the reservation pursuant to Section 1, Article IV, shall be maintained.

If a business council member changes his residence from the reservation to elsewhere within Whatcom County during his term of office, and if such move results in less than the number of business council members required to live on the reservation by Section 1, Article IV, that council member's position shall automatically become vacant and shall be filled pursuant to this section.

Sec. 2. Recall. The members of the general council shall have the power to initiate recall of any member of the business council by filing a petition with the secretary of the business council signed by at least twenty-five percent (25%) of the number of those voting at the last regular general council meeting, asking for the recall of said member of the business council; or, the business council may, by majority vote, initiate recall of any councilman for neglect of duty or gross misconduct, provided that in neither procedure shall a person be recalled except at a special meeting of the general council called for that purpose within thirty days after the business council action or the filing of the voter petition, provided that he shall be given in writing a statement of the charges against him at least ten (10) days prior to the general council meeting, provided further, that he shall be given an opportunity to answer any and all charges. A two-thirds (2/3) majority vote of those attending the meeting shall be required to effect recall. The general council's decision shall be final.

Sec. 3. Unexcused Absence. Any councilman who shall absent himself from three (3) successive meetings without being excused for cause, shall forfeit all rights to his office.

## **ARTICLE VI - POWERS AND DUTIES OF THE BUSINESS COUNCIL**

Section 1. The Lummi Business Council shall have the following powers, subject to any limitation imposed by Federal statutes or by the Constitution of the United States:

- (a) To administer all tribal property and assets, by ordinance where required;
- (b) To borrow money from the Federal Government, or other sources, and to direct the use of such funds for productive purposes, or loan money to members of the Lummi Tribe, as defined in Article II;
- (c) To collect and expend any Lummi tribal funds within the exclusive control of the tribe, and to recommend the expenditure of any other tribal funds;
- (d) To purchase or lease in the name of the Lummi Indian Tribe any land or other property the council may deem beneficial to said Lummi Tribe;
- (e) To enforce regulations contained in approved tribal resolutions and ordinances for the protection of tribal property, fish and wild life, and other natural resources of the Lummi Tribe;
- (f) (1) To levy assessments or license fees on nonmembers doing business or obtaining special privileges within the reservation, subject to the approval of the Lummi Nation General Council.

[Amended: Resolution #97-38, February 11, 1997.]

(2) To promulgate rules and regulations and enforce assessments or license fees on members exercising special privileges or profiting on general resources from tribal property;

- (g) To negotiate with the Federal, State, and local governments on behalf of the tribe;
- (h) To employ legal counsel, the choice of counsel and fixing of fees to be subject to the approval of the Lummi Nation General Council;  
[Amended: Resolution #97-38, February 11, 1997.]
- (i) To prevent the sale of tribal lands or interests in tribal lands without the consent of the general council;
- (j) To exclude from the restricted land of the Lummi Reservation persons not legally entitled to reside therein, under ordinances which shall be subject to the approval of the Lummi Nation General Council;  
[Amended: Resolution #97-38, February 11, 1997.]
- (k) To promulgate and enforce ordinances, which shall be subject to the approval of the Lummi Nation General Council, governing the conduct of members of the Lummi Tribe, and providing for the maintenance of law and order and the administration of justice by establishing a reservation court and defining its duties and powers;  
[Amended: Resolution #97-38, February 11, 1997.]
- (l) To safeguard and promote the peace, safety, morals, and general welfare of the Lummi Reservation by regulating the conduct of trade and the use and disposition of property upon the reservation, provided that ordinances directly affecting nonmembers of the tribe shall be subject to approval of the Lummi Nation General Council;  
[Amended: Resolution #97-38, February 11, 1997.]
- (m) To adopt resolutions regulating the procedure of the business council itself and subordinate tribal organizations, and tribal officials over whom it has jurisdiction;
- (n) To promote public health and education, encourage Indian handicrafts, the administration of charity, the conservation and utilization of natural resources, and such other services which may contribute to the social advancement of the tribe;
- (o) To make rules and procedures not inconsistent with the provisions of this constitution governing all tribal elections, which shall, among other things, provide for secret balloting;

- (p) to delegate to subordinate boards or to cooperative associations which are open to all members of the tribe, any of the foregoing powers, reserving the right to review any action taken by virtue of such delegated powers, provided that all final action must be taken by the business council.

Sec. 2.        Future Powers.        The Lummi Business Council may exercise such further powers as may, in the future, be delegated to the business council.

Sec. 3.        Reserved Powers.        Any rights and powers heretofore vested in the tribe but not expressly referred to in this constitution shall not be abridged by this article, but may be exercised by the people of the Lummi Reservation through the adoption of appropriate bylaws and constitutional amendments.

## **ARTICLE VII - REFERENDUM**

Upon receipt of a petition of at least twenty-five percent (25%) of the voting membership of the tribe, or upon the request of the majority of the full membership of the business council, the chairman shall call a special meeting of the general council to be held within thirty (30) days of receipt of such petition or request, to consider any enacted or proposed ordinances or resolutions, and the vote of the majority of the voting membership attending the special meeting will decide whether the enacted or proposed ordinances or resolutions shall thereafter be in effect, provided that twenty-five percent (25%) or more of the eligible voters shall vote in such referendum. Public notices of all special meetings shall be made in accordance with Section 1, Article III.

## **ARTICLE VIII - BILL OF RIGHTS**

All members of the Lummi Indian Tribe shall be accorded equal rights pursuant to tribal law. No member shall be denied any of the rights or guarantees enjoyed by non-Indian citizens under the Constitution of the United States, including, but not limited to, freedom of religion and conscience, freedom of speech, the right to orderly association or assembly, the right to petition for action or the redress of grievances, and due process of law. No member shall be denied any of the rights or guarantees as provided in Title II of Public Law 90-284 -- the Act of April 11, 1968 (82 Stat. 77 and 78) as follows:

No Indian Tribe in exercising powers of self-government shall ---

- (1) make or enforce any law prohibiting the free exercise of religion, or abridging the freedom of speech, or of the press, or the right of the people peaceably to assemble and to petition for a redress of grievances;
- (2) violate the right of the people to be secure in their persons, houses, papers, and effects against unreasonable search and seizures, nor issue warrants, but upon probable cause, supported by oath or affirmation, and particularly describing the place to be searched and the person or thing to be seized;
- (3) subject any person for the same offense to be twice put in jeopardy;

- (4) compel any person in any criminal case to be a witness against himself;
- (5) take any private property for a public use without just compensation;
- (6) deny to any person in a criminal proceeding the right to a speedy and public trial, to be informed of the nature and cause of the accusation, to be confronted with the witnesses against him, to have compulsory process for obtaining witnesses in his favor, and at his own expense to have the assistance of counsel for his defense;
- (7) require excessive bail, impose excessive fines, inflict cruel and unusual punishments, and in no event impose for conviction of any one offense any penalty or punishment greater than authorized by the Indian Civil Rights Act, Title II of Public Law 90-284, as amended from time to time;  
[Amended: Resolution #2001-022, February 6, 2001.]
- (8) deny to any person within its jurisdiction the equal protection of its laws or deprive any person of liberty or property without due process of law;
- (9) pass any bill of attainder or ex post facto law; or
- (10) deny to any person accused of an offense punishable by imprisonment the right, upon request, to a trial by jury of not less than six persons.

## **ARTICLE IX - AMENDMENTS**

This constitution and bylaws may be amended by a two-thirds (2/3) vote of the General Council voting at an election called for that purpose, provided that at least thirty percent (30%) of the General Council entitled to vote shall vote in such an election.

It shall be the duty of the Lummi Indian Business Council to call an election upon a two-thirds (2/3) vote of the members of the business council present at a duly convened meeting or upon receipt of a petition signed by thirty (30) eligible voters of the General Council of the tribe.

[Amended: Resolution #96-28, February 8, 1996.]

## **BYLAWS OF THE LUMMI TRIBE**

### **ARTICLE I - THE BUSINESS COUNCIL**

Section 1.     The chairman of the business council shall preside over all business and general council meetings of the tribe. He shall be allowed to vote only in case of a tie. He shall exercise any authority specifically delegated to him by the business council.

Sec. 2.        The vice-chairman of the business council shall assist the chairman when called upon to do so. In the absence of the chairman, he shall preside, and when so presiding, have all the rights, privileges, and duties, as well as the responsibilities, of the chairman.

Sec. 3.        The secretary shall prepare all tribal correspondence and shall not sign notices or documents unless authorized by the business council. It shall be the duty of the secretary to keep a complete and accurate record of all matters transacted at council meetings and to submit copies of minutes of all meetings of the business council and general council to the Western Washington Agency.

Sec. 4.        The treasurer shall have custody of and be responsible for all funds in the custody of the business council. The treasurer shall deposit all such funds in such federally insured banks or elsewhere as directed by the business council and shall keep proper records of such funds. The treasurer shall report on all receipts and expenditures and the amount and nature of all funds on hand at the annual general council meeting and upon request of the business council. The treasurer shall not pay out any funds except when authorized to do so by the business council and all checks must be signed by the treasurer. The business council shall decide when the amount of funds being handled by the treasurer has become large enough to justify the need for an annual audit. It shall then require that the books and records of the treasurer shall be audited by either a competent auditor or by a Federal employee appointed by the Commissioner of Indian Affairs or his authorized representative. The treasurer will be required to have a surety bond satisfactory to the business council and the Superintendent of the Western Washington Agency. The surety bond will be obtained at the expense of the tribe.

Sec. 5        Appointive Officers. The duties of all appointive committees and officers appointed by the business council shall be clearly defined by resolution of the business council at the time of their creation or appointment. Such committees or officers shall report from time to time, as required, to the business council and their activities and decisions shall be subject to review by the business council upon petition of any person aggrieved.

## **ARTICLE II - INSTALLATION OF OFFICERS AND COUNCIL MEMBERS**

Newly elected members who have been duly certified shall be installed thereafter at the next regular meeting of the business council. Each member of the business council and each officer or subordinate officer, elected or appointed hereunder, shall take an oath of office prior to assuming the duties thereof, by which oath he shall pledge himself to support and defend the Constitution of the United States and this constitution and bylaws.

Oath: "I, \_\_\_\_\_, do solemnly swear that I will support and defend the Constitution of the United States and the constitution of the Lummi Tribe; that I will carry out, faithfully and impartially, the duties of my office to the best of my ability; that I will cooperate, promote, and protect the best interests of my tribe, in accordance with its constitution and bylaws."

## **ARTICLE III - TIME AND PLACE OF MEETINGS AND PROCEDURE**

Section 1.    Regular meetings of the business council shall be held on the first Friday of each month. The date of regular meetings may be changed by resolution of the business council. Meetings shall be held at the business office or such other places as the business council may

designate from time to time. Special meetings may be called by written notice to all councilmen, signed by the chairman, or by a majority of the business council, and when so called by written notice to all councilmen, the business council shall have power to transact business as in a regular meeting.

Sec. 2.        The annual election and general council meeting shall be held during the first week in January of each year, or at such other time as the business council determines.

Sec. 3.        Quorum.        No business shall be transacted unless a quorum is present. A quorum of the business council shall consist of six (6) members of that council. A quorum of the general council shall consist of twenty-five (25) eligible voters; provided, however, that the lack of a quorum shall not be cause for postponing the annual election of tribal officials.

Sec. 4.        The order of business for all meetings is that established in Robert' s Rules of Order, Revised Edition.

#### **ARTICLE IV - RATIFICATION OF CONSTITUTION AND BYLAWS**

This constitution and bylaws, when adopted by a majority vote of the adult voters of the Lummi Tribe, voting at a special election authorized by the Lummi Indian Business Council in which at least thirty percent (30%) of those entitled to vote shall vote, shall be submitted to the Lummi Indian Business Council for its approval. It shall be in force from the date of such approval.

[Amended: Resolution #98-23, March 6, 1998.]

#### **APPROVAL**

I, James F. Canan, Commissioner of Indian Affairs do hereby approve the foregoing Constitution and Bylaws of the Lummi Tribe of the Lummi Reservation, Washington, as provided for in Article IV of the bylaws **-RATIFICATION OF CONSTITUTION AND BYLAWS** of said document.

S/ James F. Canan  
Acting - Commissioner of Indian Affairs

Washington, D.C.

DATE: April 10, 1970

#### **CERTIFICATION OF APPROVAL OF AMENDMENT "A" (Article IX)**

I, Hilda A. Manuel, Deputy Commissioner of Indian Affairs, by virtue of the authority delegated to me by Article IX of the Constitution and Bylaws of the Lummi Tribe of the Lummi Reservation, Washington hereby approve Amendment A. This Amendment is effective as of this

date, PROVIDED, that nothing in this approval shall be construed as authorizing any action under this document that would be contrary to Federal law.

S/ Hilda A. Manuel  
Deputy Commissioner of Indian Affairs

Washington, D.C.

DATE: June 20, 1996

**GIS information used in creating these maps:**

<i>Layer</i>	<i>Location</i>
<b>Base map information used on most maps:</b>	
Roads	z:\data\transportation\roads_whatcom county
Reservation Boundary	z:\data\boundaries\lummireservation
Tidelands	z:\data\boundaries\lummi_tidelands
Ocean	z:\data\water\wabc_water
Hillshading	z:\data\terrain\dem\vic_hlshdlite
Labeling	j:\data\lummi_reservationdata\reservationannotations
Rivers	z:\data\water\hydro_majordrainages
Streams	z:\data\water\streams99
<b>Map 1 - General Location of the Lummi Indian Reservation</b>	
US Cities	z:\data\places\us_cities_dtl
Canadian Cities	z:\data\canada\mjcities
Province Boundaries	z:\data\canada\province
State Boundaries	z:\data\boundaries\usa\us states
Canadian Rivers	z:\data\canada\250k_base\rivr
Canadian Roads	z:\data\canada\mjrroads
WA Roads	z:\data\transportation\highways
WA Rivers	z:\data\water\warivers
US/Canadian Border	z:\data\boundaries\uscanborder
WA Lakes	z:\data\water\lakes_wa
Hillshade	z:\data\terrain\dem\prism_hs.tif
<b>Map 2 -Usual and Accustomed Grounds and Stations (U &amp; A)</b>	
Usual and Accustomed Area	z:\data\boundaries\lummi_uanda
Point Elliot Treaty Area	z:\data\boundaries\cededlands
Canadian Cities	z:\data\canada\mjcities
US Cities	z:\data\places\us_cities_dtl
Canadian Roads	z:\data\canada\mjrroads
WA Roads	z:\data\transportation\highways
Hillshade	z:\data\terrain\dem\prism_hs.tif
<b>Map 5 - Lummi Reservation Watersheds</b>	
Watersheds	z:\data\boundaries\watersheds\lummiwatersheds_poly
<b>Map 6 - Average Annual Precipitation</b>	
Precipitation	j:\data\general_gis\washington_gis\regional\usda\annual
US Cities	z:\data\places\us_cities_dtl
Roads	z:\data\transportation\wastateroutes
<b>Map 7 - Soil Units</b>	
Hydric Soils & Soils Units	z:\data\environmental\soil\lummisoilclass_2002

<i>Layer</i>	<i>Location</i>
<b>Map 8 - Soil Runoff Potential</b>	
Soil Characteristic	z:\data\environmental\soil\lummi\soilclass_2002
<b>Map 9 - Storm Water Facilities</b>	
Culverts	j:\data\lummi_reservation\data\water_resources\stormwater\culverts\culverts
Ditches	j:\data\lummi_reservation\data\water_resources\stormwater\ditches
<b>Map 10 - Wetland Areas</b>	
Approximate Wetlands	Z:\Data\Water\Wetlands\Wetlands_BestAvailable.shp
Delineated Wetlands	Z:\GISpublic\LeeF\MasterWetlands.shp
<b>Map 11 - Geology</b>	
Geologic Units	j:\data\nooksack_basin_data\entirewatershed\geology\clip_gunit
<b>Map 12 - Ground Water Characteristics</b>	
Groundwater Associations	z:\data\boundaries\groundwater_associations
Ground Water Characteristics	z:\data\water\groundwater
<b>Map 13 - Well Classification</b>	
Well Classifications	z:\data\water\aquifer
<b>Map 14 - Wells and Wellhead Protection Areas</b>	
Wells	z:\data\water\wells\lummi_locations_08-01-02
Wellhead Protection Zones	z:\data\boundaries\wellheadprotectionzones\whprotzn
<b>Map 15 - Eelgrass Beds</b>	
Eelgrass	z:\data\environmental\landuse_cover\nearshore_dnr\whatcom\data\VEG95VC.shp
Herring Spawn Areas	z:\data\environmental\animals\priorityspecieswdfw\shapefiles\mrsdata\herrspwn.sh
Herring Holding Areas	z:\data\environmental\animals\priorityspecieswdfw\shapefiles\mrsdata\herrhold.shp
Surf Smelt Spawning Areas	z:\data\environmental\animals\priorityspecieswdfw\shapefiles\mrsdata\smelt.shp
Sand Lance Spawning Areas	z:\data\environmental\animals\priorityspecieswdfw\shapefiles\mrsdata\sandlanz.shp
<b>Map 16 - Manila Clam Distribution</b>	
Seaponds Manila Clams	z:\data\environmental\animals\shellfish\shellfish
Portage Manila Clams	z:\data\environmental\animals\shellfish\portagemanila
Lummi Bay Manila Clams	z:\data\environmental\animals\shellfish\lummimanila
<b>Map 17 - Dairy Lagoons in Reservation Watersheds and Surrounding Areas</b>	
Dairy Lagoons	z:\data\places\dairy_doe9-00
Cities	z:\data\places\city
US/Canadian Border	z:\data\boundaries\uscanborder
<b>Map 18 - Bald Eagle Nests</b>	
Bald Eagles	z:\data\environmental\animals\birds\baldeaglenests_lummi.shp
Bald Eagles	j:\data\general_gis\washington_gis\regional\wdfw\hrtgpts
<b>Map 19 - Land Use and Land Cover</b>	
Land Use	z:\data\environmental\landuse_cover\noa_landcover\wa_wa2000.img

*Layer*

*Location*

Map 20 - Lummi Reservation Zoning

Zoning

z:\data\planning\zoning\_officiallummi

Map 21 - Lummi Reservation Community Facilities

Points of Interest

z:\data\places\pointsofinterest\_lummi

Map 22 - Land Ownership of the Lummi Reservation and Nea

Ownership Status

z:\data\cadastral\parcels\_2003\_update

Map 23 - Households 1910

Roads Circa 1910

z:\data\transportation\lummihistoricroads

Households 1910

z:\data\planning\households1909-15

Map 24 - Households 1950

Households 1950

z:\data\planning\households1950

Map 25 - Households 1976

Households 1976

z:\data\planning\households1976

Map 26 - Households 2004

Households 2004

z:\data\planning\households2004